

# GRADUATE

THE UNIVERSITY OF TORONTO ALUMNI MAGAZINE

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# GRADUATE



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**Editor:** John Aitken

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**Art Director:** Andrew Smith **Production Co-ordinator:** Sandra Sarner

**Layout & Typesetting:** Chris Johnson

**Cover Illustration:** Doug Martin

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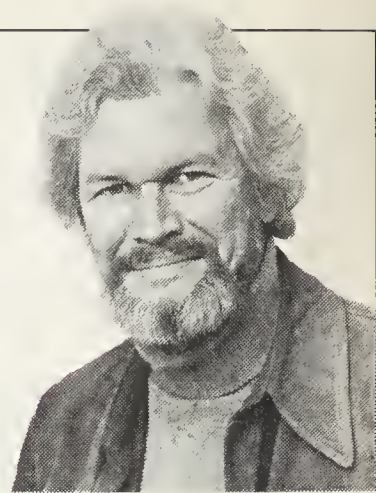
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# MYTH-BREAKING



LAST AUTUMN THE RESULTS OF A GALLUP POLL GAVE the lie to what even university administrators and faculty had wearily come to accept as reality: that the people of Ontario had cooled on the cause of higher education in general, and the adequate funding of universities in particular. Not so.

Eighty-two per cent of those polled indicated that they believed annual funding increases for the universities should at least match inflation, and 42 per cent felt that if the government is short of funds it should take them from other programs. Eighty per cent felt that if underfunding continues, universities should decrease the number of students admitted. Fewer than 10 per cent were prepared to accept a decline in the quality of education. According to the poll, the vast majority of Ontario residents think that if funding must be cut then enrolments should be cut as well to ensure that the quality of education and research doesn't suffer.

At a time of economic crisis — whether recession, depression or somewhere in between — this is strong stuff, coming from people who are feeling the brunt of hard times yet still feel maintenance of the universities is essential.

"In other words, support for Ontario's universities remains high despite government claims to the contrary," said Professor Richard Allen, who represents Hamilton West in the provincial legislature, is the NDP's universities critic, and who teaches history at McMaster. He told the standing committee on social development that "the myth of public nonsupport" has been deliberately spread by cabinet members.

He said that the government's advocacy of more job-specific and research-specific programming threatens a grave distortion of both undergraduate and graduate levels of study. Furthermore, he said, denigration of the universities is lowering morale and encouraging in them "a level of affordable mediocrity . . . as will back this province right out of the modern world."

Allen read into the record a statement by President James Ham defining the nature of the university as the corporate realization of man's will to know and to understand. Bette Stephenson, minister of colleges and universities, endorsed the President's definition as "one which I can appreciate and understand and support vigorously." She added that Allen's summary constituted "the most learned presentation regarding universities that we have enjoyed in the four years that I have been minister."

On page 10, President Ham discusses the bind we are

in and calls for a restatement of public policy for the province's universities. "Present policy served well for the era of massive expansion. We no longer live in such times." He offers ideas to consider which, if embodied in a coherent government policy would make it easier for all universities to define reasonable goals and achieve them.

On page 20 Professor David Strangway, provost of the University, offers a candid discussion of faculty and the role he feels tenure must continue to play in maintaining excellence in teaching and research. He says further that steps should be taken to ensure that students who are able to cope with the rigours of the academic programs available are admitted. "We cannot devote our dwindling resources to teaching those students who are not likely to do well in the University."

The University of Toronto is not attempting to stand aloof from the economic hardships that exist, but to shape itself into a taut and effective institution still with validity to its research programs, still able to graduate students well equipped to face the problems ahead.

The dilemma facing Ontario's universities is their perception that government policy is based not on planning but on the ballot box. Presumably the dilemma facing the politicians is that they must, with dwindling resources, depend on their own perceptions of the public's sense of priorities.

The Gallup Poll would appear to provide grounds for reconsideration of government priorities.

In the November/December issue of *The Graduate*, President Ham discussed various options and strategies open to the University and spoke of "a malaise among us as members of the University and as Canadians. There is a want of confidence in governments and not least in university governance and administration. There is a sense among us that the responsibility lies with someone else." It is time, he wrote, for the University to act "with confidence and courage" to review its commitments, to become "an intellectually leaner and tougher place".

Perhaps the most useful role *The Graduate* can play is to provide space for a public dialogue, for alumni are in a position to provide strong political support as well as considered thought about how the University should proceed. As always, your letters are welcome.

A stylized, handwritten signature of John Aitken in dark ink.

John Aitken, Editor



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# LOOKING FOR WORK

BY ESTHER FISHER

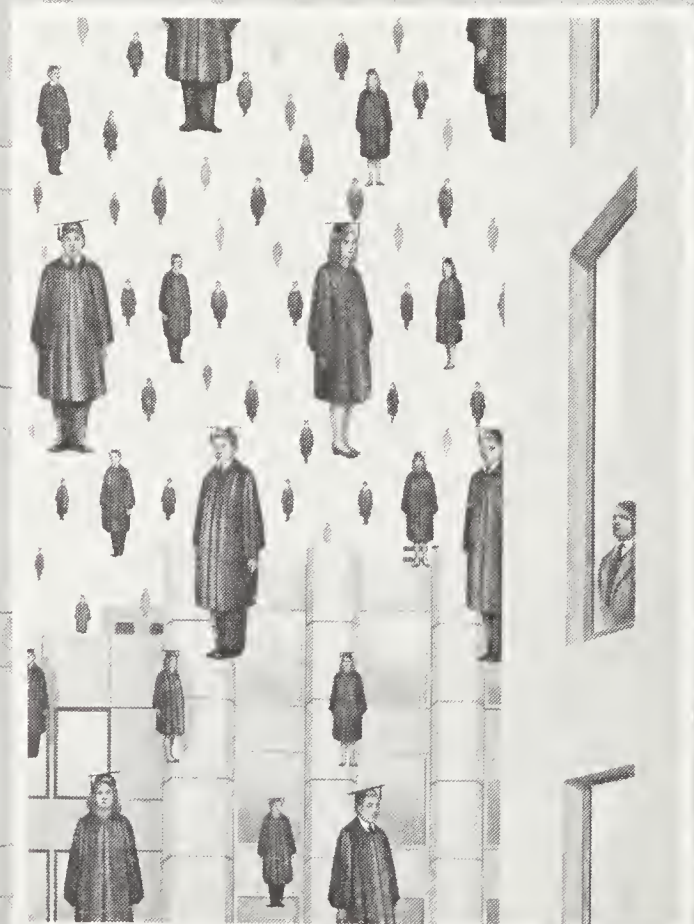
**O**N THE SIXTH FLOOR OF A NONDESCRIPT BUILDING at 344 Bloor Street West throngs of students chew their fingernails or pace the floor as they wait for interviews with prospective employers. The same scenario is being played out on the fourth floor of 720 Spadina Avenue. These are the interview locations for on-campus recruiting at the University's Career Counselling and Placement Centre, and the students here are the fortunate ones; they have at least reached the interview stage in their job hunt.

With 6,000 more students this September than last when there were 14,058 coming to the centre looking for work, and half of the 300 companies in 1981-82 registering with the recruitment program for 1982-83, the atmosphere outside the interview rooms is dead quiet but alive with tension. It's no wonder; the students, neatly dressed, polite, following suggestions on how to present themselves, and trying their best to look confident, are acutely aware of limited job possibilities.

Leslie Reisman, a lawyer called to the bar last April,

who has as well as his law degree a B.A. in history and political science, waits for an interview with the Foreign Service, which recruits employees for external affairs, manpower and immigration, and industry, trade and commerce. Of the 4,000 people who wrote the foreign service exam, he is among the 1,200 who passed and is one of 600 selected for an interview for one of approximately 100 jobs rumoured to be available this year.

Reisman started looking for work last January while he was articling. From 220 resumés sent to law firms and legal departments, he received 12 replies, nine of which were rejections, three interviews, and no job. When he finished articling, he picked up some part-time work and, for a period, was on unemployment insurance benefits. Now, he is better off than many, having recently been hired by a law firm but since his real interest is in international law, he can't see himself working on divorces for the rest of his life. If he doesn't get the foreign service job, he is considering returning to school either for a degree in international law or an M.B.A. But



NAME

Alexander Sue-Chan, B.Com.  
Commerce & Finance

NAME

Erika F. Jung, B.A.  
Commerce, Political Science

NAME

Glen A. Loney, M.A., Ph.D.  
English

NAME

Constantine Gus Droulias, B.Sc.  
Industrial Engineering

NAME

Susan B.E. Cook, B.A.  
International Relations



NAME Susan B E Cook, B.A  
International Relations



he's afraid the situation in those areas may not be any more promising. "It's tough. I never expected this," Reisman comments.

His attitude is more realistic than those who are pathetically hopeful. Ann Pardon, finishing a B.Com. degree this year, has just been interviewed for a position as a financial analyst with the commercial division of Proctor and Gamble. This was her 14th interview and she has had several second interviews, but so far, no job offer. Pardon is philosophical about the situation; she is beginning to get tired of the interviews, but says, "You get better at it each time; I'm still hopeful but not overly optimistic about finding something in my area of interest." Perhaps she'll be one of the lucky ones.

When many of this spring's graduates entered university, the possibility of being unemployed barely crossed their minds, but during the past year that eventuality has been looming ever larger, and in the fall it hit hard. Some students failed to realize how bad the economic situation is until they started getting rejection slips. Now, most are prepared for the long, arduous, and frequently disheartening search for employment.

Charlie Tompsett, a fourth year civil engineering student, smiles bitterly as he overhears the other students' tales of woe. He is understandably apprehensive as he waits for an interview with a computer related information system company. He has filled out 11 applications; this is his second interview. "I realized that things were not good for civil engineers when I started university," he says, "but we were told they would get better; instead they've gone the other way." There are 84 students in his graduating class; in September they were advised that Ontario Hydro which, in the past, hired about 15 new civil engineers each year, would not be hiring any this year.

Ontario Hydro, after starting to interview on campus this fall, realized there would be few jobs to offer, and so cancelled its graduate recruitment at universities and withdrew job offers to students who had worked during the summer in its student developmental program. It is this type of action that makes many students feel there are no jobs at all, that some companies are going through the interview process just to save face and discover prospective employees for the future.

This is highly unlikely since on-campus recruiting is expensive, but student attitudes to the Hydro incident reveal the despair of many young people. And, if they

*Esther Fisher is a Toronto freelance writer.*

feel that way in the fall, what's going to happen in February or March if there are still no jobs and the pressure of final exams adds to anxiety?

The burden of trying to answer this question falls on Rivi Frankle, the young director of the U of T's Career Counselling and Placement Centre and president of the University and College Placement Association (UCPA). She is genuinely concerned and making heroic efforts to help students against seemingly insurmountable odds. "Even though unemployment among university graduates is lower than among those without post-secondary education," says Frankle, "the new graduate may find it takes a lot longer than in the past to get a first job. The drastic decrease in recruitment strikes a severe blow, especially for engineers who used the program as a major source of job opportunities. In an effort to help students, we contact employers, find out what qualifications they are looking for, and try to interest them in our services. And, we arrange interviews, prepare students for the job search, encourage them, and try not to get discouraged ourselves." But, when she adds, with seeming conviction, "there are jobs out there," one can almost detect a note of whistling in the dark to bolster her own spirits.

Ultimately, the hopes of the students are on her shoulders, and Frankle takes her responsibilities seriously. Explaining various functions of the Placement Centre and the current employment difficulties, she is warm, sympathetic to the plight of the students, and thoroughly professional.

At no charge to the students, although a book dealing with job search skills may be purchased voluntarily for \$2, the centre offers two major services: a permanent job registry for recent graduates (those who have graduated in the past two years) and on-campus recruiting. The recruiting program starts in mid-October and lasts until March. During that time large companies such as Bell Canada visit several universities to recruit students in their final year who will be ready to start work in May. Last year, each company registered with UCPA visited an average of 13.6 campuses; this year, the expected average is 6.9. Last year, the average number of positions available per employer was 43; now it is half that. Perhaps more revealing than statistics — Bell Canada, Stelco, Dofasco and Dupont, companies which have recruited at U of T in the past, are not coming at all this year, and Ontario Hydro withdrew from the program.

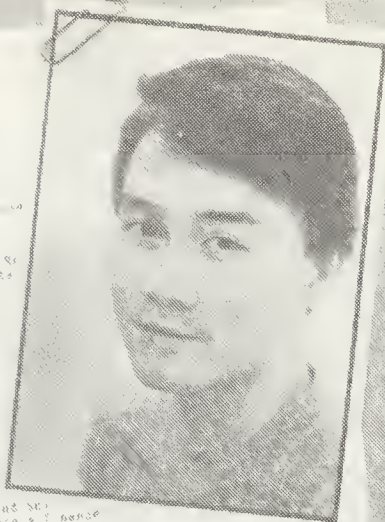
Overall, for 1981-82, employers in the recruiting pro-

NAME Constantino Gus Droulias, B.Sc  
Industrial Engineering





NAME

Alexander Sue-Chan, B.Com.  
Commerce & Finance

marks — which show ability; extra-curricular involvement — which reveals leadership qualities; work experience — especially important is willingness to assume responsibility above and beyond what is expected on the job. These qualities are weighed and if marks are not consistently high, the candidate must compensate by superior performance in either or both of the other categories.

During the interviews, Lendrum tries to delve into areas beneath the surface with questions such as "How do you handle conflict?" — "How would you feel about crossing a picket line during a strike?" — "How would you handle a tough disciplinary case?" and an invitation to "give me a realistic assessment of your weaknesses."

"The onus," says Lendrum, "is on the students to prove themselves." Of the 57 who survive this hurdle, five will be selected for a day visit to the Proctor and Gamble plant where two in-depth interviews will be conducted. Positions will be offered to one or two of them.

And the personality traits that make a good production manager are the same as those that make a hot-shot insurance salesman. Daryl Diamond, interviewing students for London Life, is more interested in personal attributes than he is in academic achievement. He doesn't necessarily look for those with top marks, but for eager graduates of B.A. or B.Com. programs. After the initial interview 290 of the 1,300 interviewed on campus will be selected for a day visit to the head office in London. They are the ones who will have displayed initiative, self-discipline, ability to relate to others, to have been elected to offices in student or service organizations (which reveals the respect of peers), and most importantly, says Diamond, the ability to surmount difficulties. "I want to know what they have done to prove they can get up after they've been knocked down," he explains. Of the 290 visiting London, 130 will be offered positions; 93 will accept; the others, usually because they have better offers, will go elsewhere.

Everyone, it seems, wants similar personal characteristics in their employees. A survey of employers across Canada conducted by UCPA shows that the five most important factors employers seek are: ability to communicate, willingness to take initiative, willingness to accept responsibility, leadership potential, motivation, and ambition. It's not surprising then, that the same students are getting the bulk of the interviews.

"It's not that students aren't trying," comments Frankle, "as soon as I post notices for interviews or seminars on career planning or job search techniques,

gram had 5,127 positions to offer; for 1982-83, there are 2,796. Demand is down in all disciplines listed in a UCPA survey. "Even in good times," claims Frankle, "the majority of jobs available through on-campus recruiting were for commerce and engineering students. Never more than 40 per cent of employers participating in the program looked for arts and science graduates and this year it is half that." Now, the need for computer science graduates is down by about a third, for commerce by a fifth, and by roughly a half for engineering.

One company interviewing engineers on campus is Proctor and Gamble. Ken Lendrum, who conducts some of the interviews, says, "We are looking for students for managerial positions in the technical division of Proctor and Gamble in Hamilton. Since most of our promotions are developed internally, we want people at the starting level, and that is the area most severely affected by cut-backs. Since last January, when the definite slump in the economy became apparent, things have gone progressively down-hill. In the 10 years I've been with the company, this is the worst year for students."

Because, in the past, the company has found engineers to be the most successful in their technical division, Lendrum hires them almost exclusively. Not, he says, for specific technical skills, but for the ability to manage, motivate and get ahead; as well, engineers would be comfortable in the environment of the plant. Lendrum continues, "Engineers have come through a demanding course, know how to work hard and, generally, are high achievers with high energy levels. Women engineers are especially impressive; they go into engineering because they really want that profession, and it's tough for a woman to get through a difficult course dominated by men who flaunt their 'macho' image. In the past three years, one-third of the engineers we've hired have been women."

In addition to drive, Lendrum looks for candidates who are friendly and in whom workers might confide. An engineer himself, who came up through the ranks from quality manager to group manager to a recent promotion to the head office in Toronto in the 10 years since he graduated, Lendrum displays the confidence, energy and out-going nature he seeks in others. "What I'm looking for," he says, "is aggressiveness and high motivation, in short, the guy who bowls you over during an interview."

How does he find these supermen and superwomen? From among hundreds of applications, students are selected for interview on the basis of three categories:

NAME

Eva F. Jung B.A.  
Commerce, Political Science



NAME

Glenn A. Loney, M.A. Ph.D.  
English

they are over-subscribed. But students must realize that on-campus recruiting, the jobs listed at the centre, and the newspapers are only three of the many sources for finding employment." Since 80 per cent of jobs are in what she terms "the hidden market", that is, they are not advertised, it is necessary for the job hunter to use every possible contact. "Don't be shy about telling friends, relatives, professors, everyone you know, that you are looking for a job," she advises students. "Furthermore, chances of finding work will be better if you are prepared for the various stages of job hunting."

And her voice is filled with enthusiasm and pride as she talks about how the Placement Centre can prepare students. Career counselling is for everyone, she says; students should start thinking about future employment in their first year when a counsellor can help them focus on areas of interest and make them aware that employers will be looking at the "total person". During the middle years it is time to examine various occupations, look at alternatives, and evaluate one's skills and values. In the final year, learn how to job hunt.

Aside from teaching specific techniques such as writing resumés, how to translate skills acquired at university into something employers want, how to find out about specific job requirements and investigate the diversity of specialties in any given field, the emphasis at the centre is on learning to sell oneself.

And if ever there was a living example of what it takes to be successful, it's Rivi Frankle, the director of the centre. Whether her charm is acquired or innate is unimportant, she has what it takes to impress others. Respected by her staff, admired by almost everyone with whom she comes in contact, Frankle has risen to the top in her field, not through specific formal education, but through eagerness, interest, and dedication to her job and to the students who are the ultimate recipients of the services offered at the centre.

After graduating from University College in 1968 with a B.A. in psychology and English, Frankle studied at the Institute of Child Study, then worked at a centre for the mentally retarded and later for a consulting firm, before returning to the Institute of Child Study as a research assistant. When the project on which she was working ran out of sufficient funds to pay her a living wage, she walked into the University's Placement Centre looking for a part-time job to tide her over until the project was finished. Obviously impressed, the counsellor offered her a part-time job at the centre. Starting in April 1971, she

helped set up a career information library and worked on a paper dealing with the social responsibility of the Placement Centre. When, in August of the same year, a position for a full-time counsellor was available, Frankle applied, was hired, and in 1974 became director. Last year she was elected president of UCPA, and re-elected this year.

As an administrator she is superb, handling the complex duties of her position tactfully and naturally. She is responsible, among other things, for the overall supervision of three offices — one on the St. George campus, one at Scarborough, and one at Erindale. Hiring staff, drawing up and administering the budget, planning programs, including those for part-time and summer employment, supervising the dossier service for those with graduate degrees, and running special placement services for the Faculty of Education and the Faculty of Forestry are all part of her duties. As well, she is in charge of the career resource centre and an active marketing program to interest employers in using the Career Counselling and Placement Centre's services.

Currently, the centre is involved in surveys to discover what type of work former graduates are doing and, looking ahead to the future, is completing a series of career information sheets dealing with skills a student would develop studying in a particular area and fields in which those skills might be used. These are meant to give students some idea of what type of employment might be best suited to their particular interests; for example, under English literature, one might find suggestions for, among other things, jobs in advertising and publishing.

If all these responsibilities aren't enough for one woman to handle, Frankle now has the added fear that, given the University's financial situation, general cut-backs in staff might affect her department and damage the quality of service available to students. That would be "the unkindest cut of all." Students agree that the Placement Centre offers them practical help, opportunities for interviews, and hope.

Encouragement is what they need right now, and Frankle still has time to take the students' troubles to heart. Her message for them is, "You may not find what you want immediately, but take temporary or part-time work and view it as a step in your career. It will help you gain experience, may lead to permanent employment or future opportunities. Don't panic and don't despair. Things will improve; above all, be prepared and be persistent."

If anything positive is to come out of this current economic recession, it may be that young people will realize that career planning is a process that continues throughout life, as goals, interests and values change, skills are refined, and new ones developed. Accordingly, students may be more flexible, work harder, devote themselves to the pursuit of excellence, and emerge stronger. But the question remains — to what end? ■

*Any reader interested in hiring a recent graduate is invited to call Rivi Frankle at the Career Counselling and Placement Centre: (416) 978-2357.*



# PUBLIC POLICY AND ONTARIO UNIVERSITIES

BY JAMES M. HAM

**T**HERE IS A SERIOUS NEED FOR THE RESTATEMENT OF public policy for the universities of Ontario. Present policy served well for the era of massive expansion. We no longer live in such times. I write therefore to invite you, the alumni, to give your active support for a restatement of public policy embodying the elements I shall set out. Such a framework is essential if the University of Toronto, among others, is to sustain its academic integrity and its leadership as Canada's most diverse research-based university.

Where do we now stand? The massive expansion in the number and scale of universities in Ontario in the sixties and the early seventies was achieved with public funds increased in proportion to the rise in enrolments. The proportion of operating costs covered by student fees steadily declined. Fees in the University of Toronto currently contribute about 15 per cent of operating income. Maximum allowable fees are set by government policy. There is a basically sound provincial program of student assistance which interlocks with a federal program of loans.

As we approached the mid-seventies, the priority assigned to expenditure on universities fell. For five years prior to the current recession, provincial increases in funding for Ontario universities fell well below inflationary costs in each year. The funding per student, rather than being based on a determination of costs, came to be derived by dividing average enrolment into a single global allocation for universities. In these circumstances, the operating grant per student in Ontario has fallen to last place among the grants made by the provinces of Canada. This sad fact is a reflection not only of the decline in governmental priority for university education, but also of current policy on accessibility and of the formula for distributing provincial funds among universities. With respect to accessibility, it remains public policy that all students who complete grade 13 with an average of 60 per cent or higher and wish to attend university are expected to be able to find a place in a university program. The formula which determines the allocation of global provincial funds among universities remains sufficiently sensitive to enrolments that some universities have judged it to be in their individual interest to expand their enrolments even though the consequence is to decrease the grant per student to all universities. The University of Toronto has chosen to limit its enrolment by sustaining high admission standards.

In short, present public policy favours accessibility over quality and is driving university education in Ontario towards mediocrity. In the University of Toronto

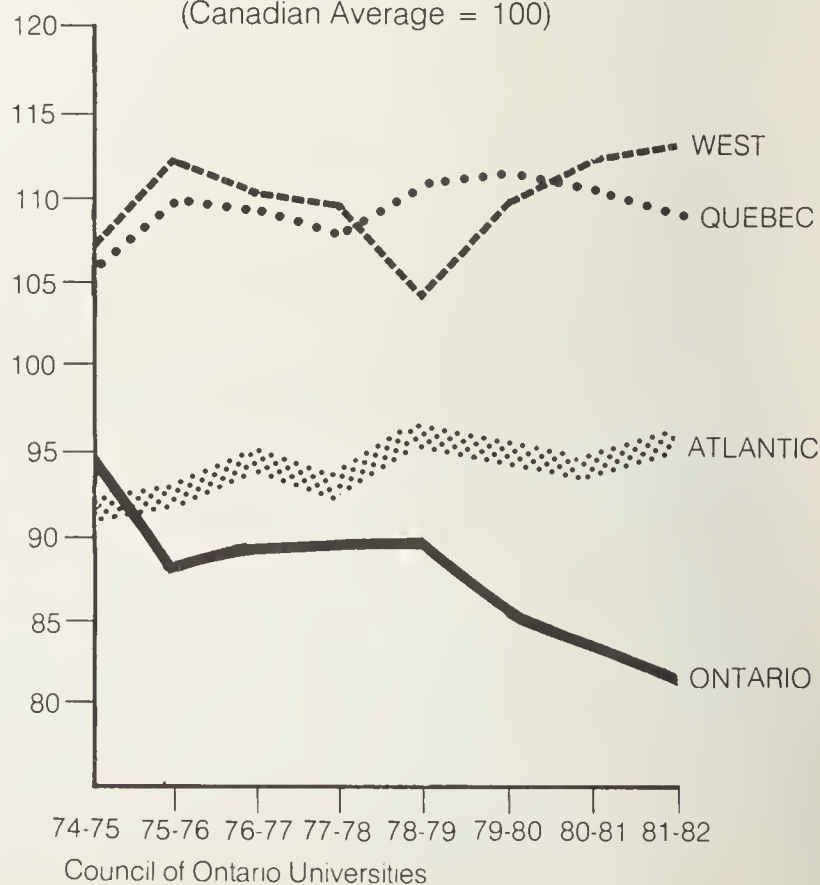
we have been striving to sustain our academic integrity with equipment for teaching and research that is obsolete. We are reducing the number of both faculty and administrative staff to strike a balance between the quality of what we do and the equitability of what we pay our people.

When there is massive unemployment in the midst of a serious decline in the whole economy, is the question of public policy for Ontario universities of any urgency? The answer must be a resounding "yes" if we are concerned about the long-term vitality of our society. If the level of academic integrity that is critical to the university as a basic institution in our knowledge-based society is to be sustained, our universities must either be funded at a level appropriate to what they are expected to do or they must be free to cut their cloth to suit what each can do with integrity. I will now set out five points towards a restatement of public policy for university education in Ontario. Before doing so, however, let me comment on what a university is, for there are serious differences among the universities of Ontario on this basic question.

What distinguishes the historical university from other types of educational institutions is that the university both teaches and discovers what there is to be taught. When teaching in a university is vivified by those who themselves are strongly engaged through research and graduate studies in probing the frontiers of what is known, the university has come to be known as a research-based university. By way of individual example, I note with pride that Professor Stephen Cook of our Department of Computer Science recently received the Turing award, which is widely recognized as the "Nobel Prize" of computer science, for identifying and posing the fundamental problem of computability that has engaged the attention of theoreticians for the past

## Operating Grants Per FTE Enrolment 1974-75 to 1981-82

(Canadian Average = 100)





decade. I recently offered the following definition of a research-based university:

*The (research-based) university is the corporate realization of man's will to know and to understand. It is committed in the long term to extending and communicating man's understanding of matter, energy and materials on the cosmic scale of galaxies, on the human scale of nuclear reactors and oil refineries and on the molecular scale of chemistry, physics and biology; of the nature of life, the processes of development, disease and death in cells, in organs such as the heart, in animals, plants and man, in communities, races and nations; of the roots and forms of political ideologies and power, of reasons why economies flourish and flounder; on the behaviour of man in families, cities, organizations; of man's sustaining imagination as expressed in literature, drama, philosophy and religion, about the shape of society as it might become. . . \**

It is critical that the academic integrity of our strongly research-based universities be sustained. Current public policy is driving them towards mediocrity. I offer the following five points towards a restatement of public policy for the universities of Ontario.

\*From "Where Do Canadian Universities Stand in Public Priorities?", published by the Association of Universities & Colleges of Canada, 1981.

1 Secondary school students who have the appropriate talents should have access to *some* form of post-secondary education or training but not necessarily to university.

2 There should be a provincial grant per place in a university program based on the determination of annually adjusted levels of costs for basic categories of undergraduate and graduate studies.

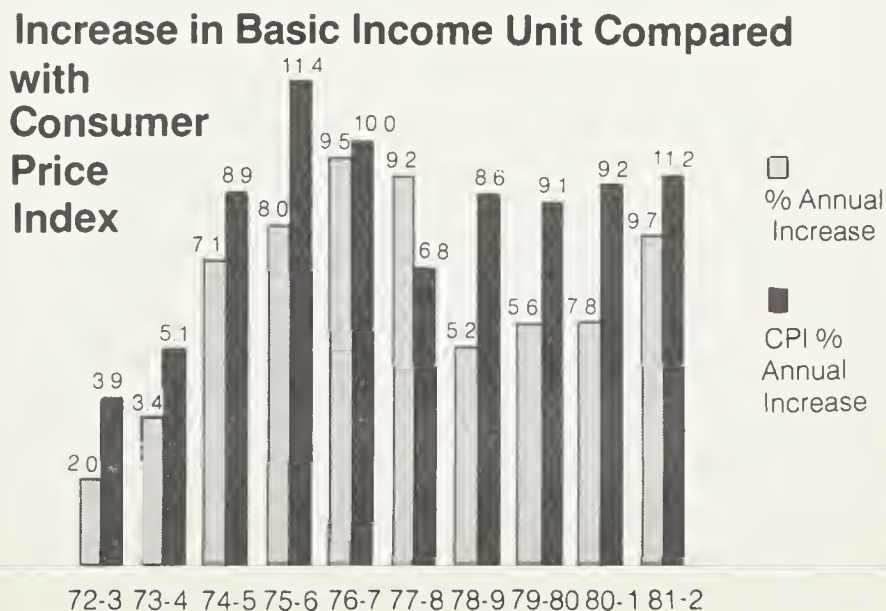
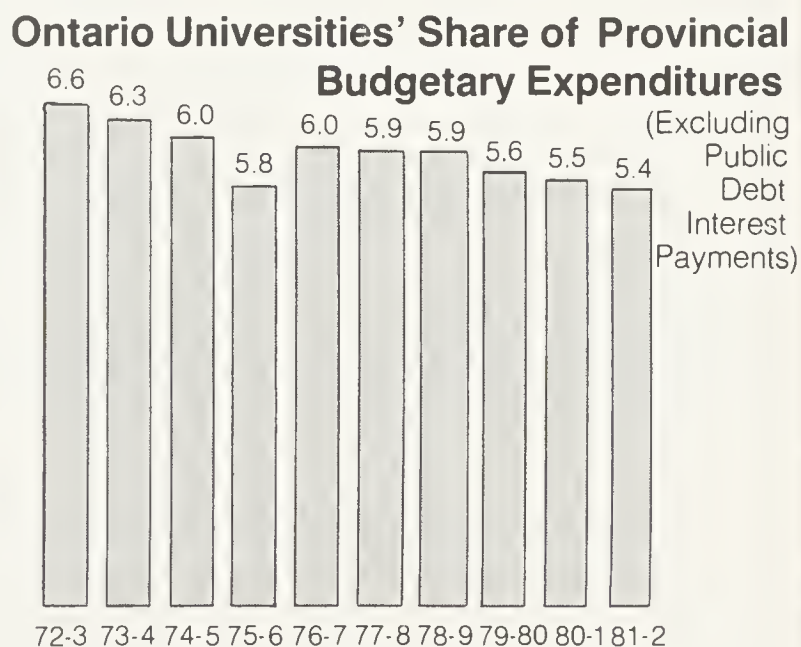
3 Quotas of funded enrolment should be set for each university on the basis of the public priority that is assigned to overall university expenditures and on the basis of the distinctive character and role of each university.

4 Universities should be given the authority to set their fees at whatever level they choose.

5 A publicly supported student assistance program similar to that in place and which makes provision for the average of institutional fees should be sustained.

It is implicit in the foregoing points that the level of accessibility to university education be limited by the level of soundly determined public funding. If we invest fewer public funds in real terms, the smaller will be the number of persons educated in universities.

Another major consideration is that there should be more explicit recognition of the differences in roles among universities. I have expressed particular concern for the place of the research-based university of which the University of Toronto is the most diverse in Ontario and Canada. ■





# WHO REALLY DISCOVERED INSULIN?

BY PAT OHLENDORF

MICHAEL BLISS TELLS ALL

**"T**HERE'S A FELLOW IN THE HISTORY DEPARTMENT who is going around asking a lot of questions about the 'true story' behind insulin. Why probe around into old scandals after all this time? The story of the discovery of insulin is a beautiful myth. It should be left alone."

That was the first time I heard of Michael Bliss, in off-the-record remarks two years ago by one of the grand old men in Toronto medicine. He had known Fred Banting, he had been particularly close to Charlie Best, and as he talked of Bliss's prodding the skeletons still rattling in the closets of Toronto medical research, he shook his head sadly, with an air of wise disapproval. The splendour of this great gift to the world was, it seemed, in danger of being tarnished.

The fruit of Bliss's labours — harvested from yellowed lab notebooks, unpublished journals and letters, the archives of the Nobel Committee, and interviews with dozens of old-timers who had been close to events in the physiology department in 1921 — is indeed a myth-basher. *The Discovery of Insulin*, published in September by McClelland and Stewart, answers the nagging question "Who really discovered insulin?" for the first time, convincingly and with impressive documentation. And in the process of answering that question, which has hung in the air for 60 years, the sloppy research, the jealousies, controversies, hatreds — even a fist-fight — that my friend had hoped would stay hidden have come tumbling out of the closet. Says Bliss, with striking understatement: "It seems to me, as a scholar, that getting at the historical truth can never do any harm."

Yet Bliss has written something far more significant than an exposé. He recreates the excitement of life in Toronto in the early 1920s, the period he calls the "golden age" of the university. He describes for the first time some curious and thought-provoking scientific tangents that accompanied the insulin research. And most important, he tells in horrifying and poignant detail what it was like to be a diabetic before 1921 and what the new elixir meant to thousands almost overnight. "Diabetics today all have an intellectual sense of how their lives hinge on insulin," reflects Bliss, "but few of

*Pat Ohlendorf is a freelance science writer and editor.*



*Professor Michael Bliss, who prodded skeletons in the closets of medical research.*

them have had to live with the prospect of death in coma as an everyday reality." By beginning and ending the book with the personal stories of diabetics, and by allowing themes of resurrection and salvation to reverberate through the account, Bliss maintains a steady rein on the revelations of the human foibles of the discoverers: they become part of the tapestry depicting the miracle of insulin, enriching and enlivening rather than marring it.

According to the myth, insulin was discovered in a few frantic weeks in the summer of 1921 by a lone genius and his partner with neither sufficient resources nor training. Fred Banting, a brilliant young orthopaedic surgeon compelled by an extraordinary vision, and his dedicated right-hand man, Charlie Best, carried out their dog experiments in a dingy, ill-equipped little room in the sweltering heat. The head of the physiology department, J.J.R. Macleod, was off enjoying himself in Scotland for the summer, having left not a whit of encouragement, only obstacles, to the young researchers in Toronto. The



myth took hold almost immediately, so that by the time the 1923 Nobel Prize for physiology or medicine was presented, not to Banting and Best but to Macleod and Banting, a multitude of eyebrows lifted. Macleod, it was felt, was horning in, accepting credit not his due. The controversy heightened when Banting, in protest, divided his share of the prize with Best, and Macleod, apparently not to be outdone, divided his with someone named J.B. Collip.

The truth, "at once more prosaic and more dramatic than the myth," dawned gradually on Bliss, who says he began his research with no preconceptions. His final judgement is unequivocal: "Insulin was discovered by a creative and impossibly volatile team composed of Banting, Best, Macleod and Collip." The Nobel Committee had made the wisest decision possible in honouring Macleod and Banting. And the final division of the prize into four equal parts reflected the true state of affairs.

Of the four scientists, Banting takes the worst beating as Bliss's conclusion emerges. "Banting was sometimes a big dumb hick," says Bliss. The man who was knighted for the discovery of insulin and went on to become the doyen of Canadian medical research was, according to Bliss, "the least talented member of the insulin team." His brilliant idea of how to isolate insulin from the pancreas was based on an incorrect understanding of that organ, he was unskilled and untrained in laboratory research, had not even bothered to read the considerable body of international literature on diabetes research, and his judgement of people was often far off the mark.

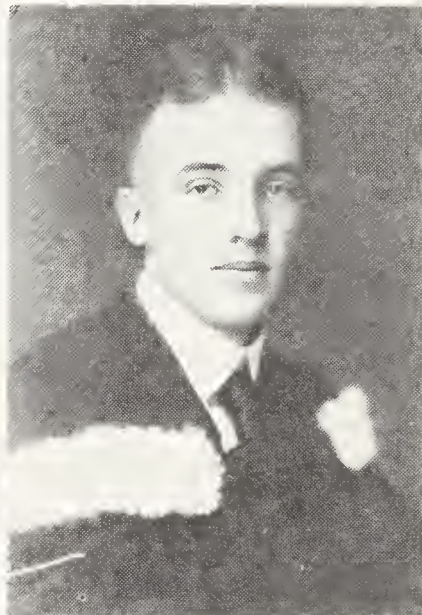
One person he was very wrong about, Bliss emphasizes, was Macleod. Banting's inexperience, insecurity, and his feeling that obstacles were being placed in his way blossomed into a life-long hatred of the older man. Macleod, as Bliss shows, was in fact sympathetic and generous to the greenhorn with his vague, poorly defined idea of how to isolate the pancreatic substance that controlled blood sugar. Macleod set Banting up with lab space in the department, provided him with one of his own student assistants, Charles Best, and from start to finish gave advice, made suggestions, and helped to steer the work. "It is one of the gravest injustices in Canadian medical history that Macleod was cast as the villain in the insulin drama," asserts Bliss. "He played an absolutely crucial role in the discovery." So did J.B. Collip, a talented biochemist on leave from the University of Alberta. Without Collip's wizardry in the lab, the Toronto extract probably could not have been purified enough to be used safely.

Although Bliss does not come out and say so, one reason all four men were not given full credit from the beginning may have been a well-intentioned attempt to protect them. If Macleod had been widely acknowledged as an essential member of the team, then the fierce enmity between Banting and Macleod would probably have surfaced. And if Collip had been publicly honoured for his contribution, the shocking fist-fight in the insulin labs might well have become part of the lore. One afternoon, perhaps overtired as well as triumphant, Collip announced to Banting that he intended to keep the formula for the insulin purification a secret and patent it. Banting responded physically. In fact, a cartoon (now unfortunately lost) drawn by another researcher and entitled



*J. R. Macleod J. B. Collip*

*F. G. Banting C. H. Best*

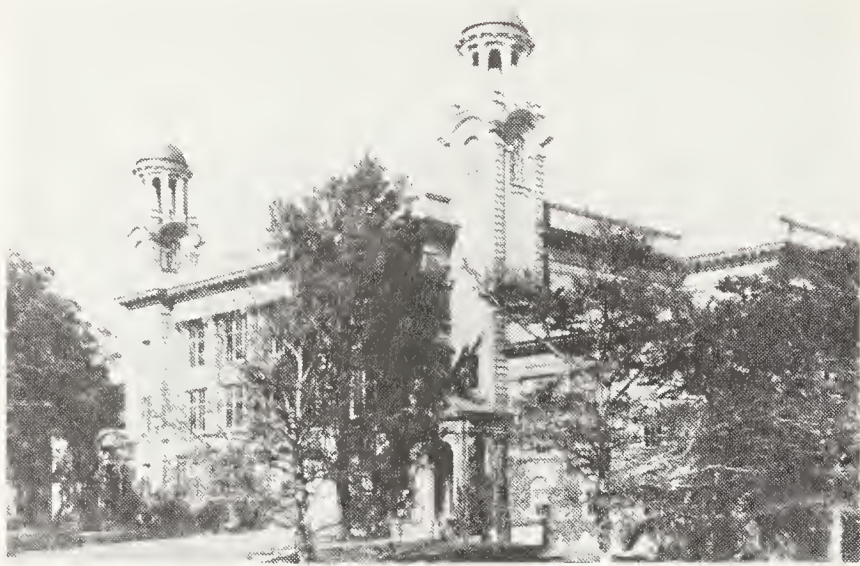


*The four co-discoverers of insulin. Macleod steered the work and Collip purified the product, but Banting and Best have had all the credit.*

"the discovery of insulin," depicted Banting pinning Collip to a chair and grasping the biochemist's neck in a strangle-hold.

Just as Bliss portrays the scandals, controversies and intense personality conflicts among the insulin team with relish, suspenseful narrative and occasional touches of humour, he also shows that the smooth scientific expertise that sped the discovery along was part of the myth. "Day by day, and dog by dog," as Bliss puts it, Banting's laboratory notebooks indicate, in retrospect, that weeks were lost and dozens of dogs done in by the faulty hypothesis that insulin could only be extracted by laboriously and surgically tying off the ducts of the pancreas, causing it to degenerate. Better insulin, it was eventually discovered, could be collected by merely chopping up chilled, whole, fresh pancreas. To add to their problems, for several harrowing months after insulin had been announced to the world, and several diabetics had been pulled back from the brink of death, the group "lost





*The Medical Building (since torn down), where insulin was discovered: hardly a log cabin with dirty, ill-equipped labs.*

the knack” of making insulin.

Finally — and more ironic than serious — for years after the great discovery, Best and Collip along with hundreds of other researchers around the world, were convinced that insulin was only the first step toward the ideal anti-diabetic substance. A furious race ensued to find a sugar-burner in plants that would be cheaper than animal insulin and could be taken orally. This tangent, described in Bliss’s book for the first time — outside of the ultimately embarrassing scientific papers published on “glucokinin” — was, in Bliss’s words, “a lovely example of a whole herd of scientists racing off into a dead end.”

Yet another aspect of the myth withers under Bliss’s informed gaze. Although Canadians have always been proud that insulin was discovered in this country, a prevailing sense of the surprising nature of that fact has accompanied the national pride. It’s a manifestation of what Bliss calls “the North American log cabin hero” tradition: that so great a marvel as insulin should have been discovered by a home-grown genius working in a dirty, ill-equipped little lab.

But in fact, declares Bliss, “those animal quarters were a very expensive research facility which very few universities could afford. Insulin was discovered at the University of Toronto and in Canada because there were the resources here to throw money and manpower and dogs into the research problem.” The post-World War I period, he continues, was an enviable time at the university: Toronto was attracting world-renowned scholars and paying them good salaries, North American foundation money was pouring in, there was a feeling that it was possible to build up a national educational and research institution that would become one of the most prestigious in the world. Although Bliss grants that because of the abundance of diabetes research taking place around the world in the early part of the century, “it would only have been a matter of five months to five years before insulin would have been discovered *somewhere*,” that Toronto won the race is not, after all, surprising. “The terrible question we face today,” he says, “is whether the University of Toronto still has the capacity to do that kind of world-class research. The university is a less dynamic, less expansive, and less lively institution now than it was in 1921.”

This is pretty rough stuff: debunking a great Canadian hero, exposing the seamy underside of a glorious chapter in medical history, and bashing away at the present fallen state of the *alma mater*. Yet Bliss can be found lecturing to appreciative alumni on such topics. He has even been invited down to the small Ontario town of Alliston by members of the Banting family to give a talk and slide show on “Uncle Fred”. Why have Bliss’s revelations been received with such aplomb?

One reason, surely, is that no matter how forcefully he may protest his alienation from the university — several discouraging years with university bureaucracy and politics led him to request an unpaid leave of absence — Michael Bliss in both looks and manner epitomizes the gentle, scholarly history professor. Plump, rosy-cheeked, bespectacled, his delivery at the podium modest and witty, Bliss could accuse the greatest figure in Canadian medical history of petty thievery, one suspects, and get away with it.

But also, in recasting the insulin story, Bliss has not simply exchanged one villain for another. His feelings for Banting are curiously mixed, his fascination with the man coming across in lectures, as well as in his book, as affectionate amusement mingled with admiration. “It may sound hackneyed,” muses Bliss, “but Banting strikes me as an existential figure, always living on the edge. Banting is the one of the four who has problems with women; he’s the one who goes to the Soviet Union and wrestles in an almost comic way with the meaning of communism and capitalism; Banting is the guy who flirts with the Group of Seven and takes painting seriously; and Banting, although he is the least competent of the four scientifically, becomes the head of medical research in the country. You know you’ve got hold of the most interesting member of the insulin team when Banting says that he won’t talk to reporters (like Ernest Hemingway of the *Toronto Star*) because it’s ‘like casting pearls before swine’.”

So fascinating does Bliss find “the hick”, in fact, that he is already deep into his next project: a biography of Sir Frederick Banting.

A more obvious reason for the success of *The Discovery of Insulin*, however, is that Bliss never loses sight of the wonder of insulin. However raucous the bickerings and frustrations of the researchers become, the detailed and powerful story of one of the first children saved by insulin — the American heiress Elizabeth Hughes — runs through the account like a crystal-clear stream. Through letters written to her mother while she was undergoing treatment in Toronto, and in interviews with Bliss 58 years later, just six months before her death, the story of the child’s “resurrection”, told in Bliss’s book for the first time, stands for the miracle that insulin became for all diabetics, the true gift that those four all-too-human Canadian researchers bestowed upon the world.

For years, a brass historical plaque honouring the discovery of insulin stood on King’s College Circle at the foot of the steps to the Medical Sciences Building. Early last summer, while Bliss’s book was in press, a truck backed into the commemorative tablet, crunching it beyond repair. Perhaps, when the province erects a new plaque next year, four names will adorn it at last. ■



# COOK'S THEOREM

BY PAMELA CORNELL

NOT SOLVING A PROBLEM  
MAY BE THE ANSWER



CERTAIN PROBLEMS IN MATHEMATICS ARE SO DIFFICULT, they defy the most sophisticated computers. Even the best theoreticians have not been able to devise general step-by-step programs for efficiently arriving at a solution.

A classic example is the problem of planning an itinerary for a travelling salesman who wants the shortest route passing through a number of cities then returning to the starting point. One obvious approach is the technique of exhaustive search but that is hardly practical since to find the shortest route through 100 cities would require millennia of calculation by the fastest computer. Even with only seven cities, there are more than 700 possible tours; and that number increases dramatically to one with 99 digits, if there are as many as 70 cities.

In any case, what is needed is not the solution for a particular set of cities, but a general method — an algorithm — making it possible to find the solution for

any cities. (Algorithms typically take the form of computer programs written in a precise computer language.)

There was a time when designers of algorithms might have sheepishly allowed their employers to berate them for failing to solve those seemingly straightforward problems, but that was before Stephen Cook came on the scene.

A professor in U of T's Department of Computer Science, Cook, 43, recently won the A.M. Turing award — the world's most prestigious prize for "lasting and major" contributions to computing. His colleagues greeted the news with wholehearted delight. Their response reflected more than mere respect for the man's work; it revealed their affection for him. Stephen Cook is a likeable guy. Quiet and unassuming, he seems far too absorbed in family life and his mathematical musings to play the prima donna.

He doesn't monopolize computer time either. In fact, he hardly ever goes near the department's enviable

STEVE BEHAL



array of electronic paraphernalia. Cook doesn't need high-powered gadgetry. His calculations take place in his head, with occasional assistance from paper and pencil.

Curiously enough, his most significant contribution to the field has been to show what computers cannot be expected to do. Textbooks praise the "brief but elegant" paper he presented during a professional conference in Ohio in 1971. So eagerly were the ideas in this paper embraced and publicized by his fellow scientists, that he didn't even bother to publish it formally himself. Titled *The Complexity of Theorem Proving Procedures*, Cook's paper laid the foundation for the theory of NP-completeness — an idea so powerful it has revolutionized the approach to solving problems that have confounded experts for years.

Mathematicians group problems according to their complexity. The simplest they call polynomial, or class P, problems. They can be solved efficiently using a predetermined list of logical instructions. This list of instructions is called a *polynomial time algorithm*.

The salesman's itinerary problem is more complex. Given larger and larger inputs (five cities, 50 cities, 100 cities, and so on), the calculation time expands explosively. Because any known method of solution requires exponentially increasing amounts of time, such methods are called *exponential time algorithms*. They are usually just a variation on the exhaustive search technique and are considered too inefficient to be practical.

Similarly complex are the scheduling problems that occur in countless areas of human activity. For example, meeting the daily manufacturing quota in an automobile plant can depend on the precise allocation of manpower and tools. Ideally, a polynomial time algorithm could be found for constructing a highly efficient schedule. Unfortunately, a seemingly logical approach will not always perform well. There are cases where increasing the number of workers on a job can actually increase the time required to meet a schedule.

Precedence constraints and differing execution times contribute to the complexity of scheduling problems. To find the optimum schedule for a set of tasks, it might be necessary to examine every possibility then choose the one with the shortest finishing time. The more tasks, the more possible priority lists, with the number of possible schedules growing so explosively there would be no hope of examining even a small fraction of them. Even if a computer could check as many as a million schedules per second, it would take more than 70,000 years to check all possible schedules for 20 tasks.

Problems for which no polynomial time algorithm is possible are referred to as *intractable*. Some are *provably* intractable, others are only *apparently* intractable.

Most of the apparently intractable problems encountered in practice can be solved in polynomial time with the aid of a "nondeterministic algorithm" which, by definition, is composed of two separate stages — a guessing stage and a checking stage. (Nondeterministic algorithms are a mathematical fiction since no real computer can execute the guessing stage.) Problems that are nondeterministically decidable in polynomial time are said to belong to the class NP (for nondeterministic

*Cook's theorem is a clearcut example of how so-called "pure" research — albeit abstract and theoretical — can bring enormous practical gains.*

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polynomial).

A problem in the class NP has the form of a yes-or-no question. There might not be an efficient means of answering the question but whenever the answer is "yes", there is a short and convincing argument proving it. A well-known brainteaser is the question of whether or not the countries on a given map can be coloured with three colours so that no two countries sharing a border have the same colour. Although no efficient algorithm is known for determining if three colours are enough for a given map, the problem does belong to class NP, with a correctly coloured map constituting a proof for a "yes" answer.

Factory scheduling and the salesman's itinerary obviously have many "yes" answers; what is being sought is the best answer. Hence, they are optimization problems, which are not fundamentally different from those that ask yes-or-no questions. In fact, every optimization problem can be rewritten in a yes-or-no form. A nondeterministic algorithm for the travelling salesman could be constructed using a stage that simply guesses an arbitrary sequence of the given cities, followed by a checking stage which indicates whether or not the given tour exceeds a specified length.

Problems in the class NP are what Stephen Cook was examining in his famous theorem. In particular, he pointed out that certain of these problems have a remarkable property: they embody the difficulty of all other problems in NP. These "elite" problems within the class NP are called NP-complete. If any one of them has an efficient algorithm, then every problem in NP can be solved efficiently.

The difficulty of map colouring is embodied in a more general problem called graph colouring. Any map can be converted into a graph by reducing each country to a point and drawing a line between two points if the corresponding countries share a border. Given the rule that no two points connected by a line can be the same colour, colouring the graph becomes the equivalent of colouring the map. If an efficient algorithm could be found for the problem of graph colouring, it could be applied with only minor modifications to the problem of map colouring, and even to the problem of factory scheduling.

Cook presented the first proof that a problem is NP-complete — a term that has come to symbolize the in-



herent intractability facing algorithm designers as they try to solve larger and more complex problems. While the theory of NP-completeness does not prove inherent intractability, it does provide straightforward techniques for proving that a given problem is just as difficult as those for which all attempts to find an efficient algorithm have failed.

Now, instead of wasting time searching for an efficient, exact algorithm, designers know enough to direct their efforts towards more potentially productive approaches — such as looking for efficient algorithms that solve various individual cases of the general problem.

Cook's theorem is a clearcut example of how so-called "pure" research — albeit abstract and theoretical — can bring enormous practical gains. He may not have published his NP-complete results himself, but their source has never been forgotten, as this year's Turing award indicates.

The award is named after British mathematician Alan M. Turing who, in the late thirties, invented conceptual devices known as Turing machines to study the mathematical properties of algorithms. Turing's main interest was not in actually solving problems, but in investigating what kinds of problems his imaginary "machines" could solve and what kinds they could not.

A Turing machine was conceived to be an automaton equipped with an infinite supply of paper tape marked off in squares. It was capable of just four actions: it could move the tape one square, either forward or backward; it could place a mark in a square; it could erase a mark already present; and at the end of a calculation, it could halt. These operations were to be performed according to a sequence of instructions built into the internal mechanism. Every algorithmically solvable problem could be solved on one of Turing's machines.

In honour of his fundamental contributions to computing, the Turing award has been presented annually since 1966 by the Association for Computing Machinery, an international association of computer scientists. (This is the first time the award has been won by a faculty member at a Canadian university.) The association's name sounds quaint today because it harkens back to the founding in the forties, when computational equipment was mechanical rather than electronic.

Anticipating the next major development in hardware, Stephen Cook has been directing his attention to a new breed of problem-solving program — the "superfast" parallel algorithm.

"We can assume that some day computers will be equipped with lots of different processors working simultaneously to solve the same problem," he says. "In fact, a researcher in New York has a grant to develop one with 4,096 ( $2^{12}$ ) processors. He doesn't plan to complete his project until at least 1990 but in the meantime, we can be taking a closer look at problems in the class P, to see which can benefit from large-scale parallel computing and which cannot."

Researchers already know that the four basic mathematical functions — addition, subtraction, multiplication, and division — could be carried out in parallel steps. For example, a computer with a million processors operating in parallel would only require about 20 steps to add two numbers of a million digits each.

Since, at each step, every one of the processors might be simultaneously performing an operation, the problem could be solved in much less computer time than it would take to sequentially add each pair of digits, carry forward if need be, then add the next pair, and so on.

Just as no one has been able to prove that NP-complete problems are inherently intractable, so no one has been able to prove that a problem in the class P can never have a superfast parallel algorithm. What can be proven is that a problem is "log space complete for P", which means there is little likelihood a superfast parallel algorithm will be found.

Cook dreams of proving that those problems in the log space complete for P category absolutely cannot have superfast parallel algorithms. To date, he has written papers that can be considered partial results.

"If I were to succeed," he says, "it would be my best mathematical result . . . far more mathematically profound than my theorem about NP-completeness. Of course, it wouldn't have the same impact as proving that NP does not equal P. That's a much more famous problem."

Cook is not prolific. He typically publishes one paper a year, but each of those papers has had long-term significance. "He keeps his mind fixed on a few well-defined themes — the really big problems," says department chairman Allan Borodin. "That's how important contributions are made." By focusing on fundamental principles, says Borodin, Cook puts the science into computer science — a field that can otherwise drift into the realm of technology rooted in intuition.

Not surprisingly, Stephen Cook is wooed by American universities. He has even been approached by Berkeley, the place that refused him tenure when he was in the math department there before coming to U of T in 1970.

"I had done some good work but I didn't have a champion," he explains with a shrug.

He had no hesitation in turning down Berkeley and says none of the others is likely to lure him away either. He likes Toronto. He and his wife, Linda, have made friends here through their interests in sailing, psychic research, and playing in amateur chamber music groups (he, the violin; she, the harpsichord). Linda likes her job as associate registrar at University College, their four-year-old son, Gordon, enjoys junior kindergarten, and Stephen is happy "working with a good, congenial group, in a friendly department."

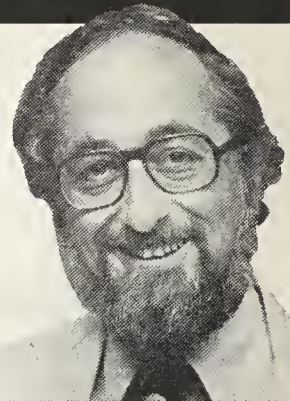
Time and money for research have been forthcoming as well. Two major research fellowships from the Natural Sciences and Engineering Research Council and the Canada Council have provided two years' release time from teaching and he is grateful not to have to spend more than three hours filling in the applications for his three-year grants from the Natural Sciences and Engineering Research Council.

Borodin is convinced Cook could not have done such good work if he'd had to play the grantsmanship games so prevalent in the U.S.

"He would have been under enormous pressure to crank out seven or eight 'cute' papers a year, rather than one of lasting importance. Of course, Steve might have resisted, but a lot of their very good people haven't been able to."



# A SPIRITED DEFENCE OF MAKING MISCHIEF



THE VIEW FROM THIS COLUMN, IT IS occasionally suggested, is of a university shrouded in a rosy, if not saccharine, haze of nostalgia. There is some truth in this. 1983 is not, assuredly, the Golden Age of the University of Toronto. But then neither was 1949 when I first saw the campus, affected still by two decades of economic depression and world war, reeling from the post-war surge in enrolment, wary of McCarthyism below the border.

That was the year Professor Leopold Infeld came under attack from George Drew and other elements of the Canadian right. A brilliant theoretical physicist, close colleague of Max Born and Albert Einstein, Infeld had been working since 1938 to build Toronto's strength in his field. After Hiroshima he had been clear-sighted enough to warn that the American monopoly of the Bomb could not last, that before long the Russians would develop a bomb of their own. That was enough in those days to raise questions about his loyalty. When he proposed to visit his native Poland in 1950, the charges began in earnest. Would he be carrying atomic secrets? No matter that Infeld had had no involvement with nuclear weaponry. The University was publicly passive, but privately refused him leave to go to Poland. He resigned and went — and stayed.

About the same time, University College banned a student production of *No Exit*, a one-act play by Jean-Paul Sartre about three people, one a lesbian, locked in a room symbolizing hell. Talk of sex was frowned upon on campus. So was drink. The University could contain the gadfly politics of a Frank Underhill, but in other areas institutional tolerance was limited.

Nostalgia cannot obscure those events and attitudes. It does, however, soften memories of a personal, if minor, brush with authority, scary as it was at the time. It began near the end of a year in which *The Varsity* had done its best to annoy and embarrass the university and undergraduate administrations. The president of the student council (now a well established Toronto doctor) had been travelling quite a bit to international student conferences. We decided to run a humour issue with the headline: WAX

FLIES TO MOSCOW. Remember, this was during the Cold War. It was said that Sidney Smith picked up the paper and blurted, "He wouldn't dare!"

Annoyance must have changed to outrage when the president read the issue's no. 2 story. It purported to be part of his most recent annual report — a section in which he called for programs in remedial English for students deficient in that tongue. The quotations from his report were verbatim apart from one change: throughout, "English" had been replaced by "sex". The *double entendres* that resulted were many, and not always elusive. Even the Engineering Society expressed official shock. Before long four senior members of the paper received registered letters summoning us before the Caput.

We had never heard of that body, but it was entrusted with student discipline. Its members were the deans of faculties, and it had the ultimate power of expulsion. One of its officers offered friendly advice. He concluded: "Well kids, I'd say you stuck your necks out and you're going to get them chopped." But we also

had defenders, the strongest of them Nicholas Ignatieff, warden of Hart House. In the end, after a nervous hour outside the Board Room in Simcoe Hall, we got off with a reprimand and a private sermon from the president.

Today it is hard to imagine such a flurry. The campus is more permissive. Within its administration, personal reaction is inhibited by a Laocoon network of committees and in the wings an ombudsman waits to redress bureaucratic licence. Perhaps it is for the better. But our tawdry little incident flared up abruptly and died almost as fast, and afterwards Sidney Smith was as friendly and accessible as before. It was like an argument in an extended family. Today it would be a matter for litigation.

The University of 30 years ago was a product of its society and far from perfect. But it did have a strong sense of community which has been dissipated. In that respect at least it was a better place. ■

*The humour issue of The Varsity, Wednesday, March 5, 1952.*

**THE VARSITY**  
THE UNIVERSITY OF TORONTO  
Wednesday, March 5, 1952

**WAX FLIES TO MOSCOW**  
Purpose Not Clear, Globetrots Anyway

Toronto has done it again!  
Without any official mandate from the National Federation of Canadian University Students (NFCUS) head office in Ottawa, Toronto's senior undergraduate, Syd Wax, has accepted an invitation from the National Federation of the Union of Soviet Socialist Republics University Students (NFUSSRUS) to attend a high level northern hemisphere student union conference in Moscow this month.

Wax, III Meda, is president of the local Students' Administrative Council (SAC), chairman of the NFCUS International Affairs Commission (IAC), president of the campus Paedagogical Society (PS) and head boy at St. Stephen's College.

Wax's decision, as always, was suddenly made. He had heard of the conference, he told reporters, but hardly expected to attend. "My studies were getting a little behind, and besides, I thought Jean-Margery Lavalie was to be the only delegate."

Wax explained that he got a phone call from Miss Lavalie early yesterday afternoon and learned

Wax was unsure of the purpose of the Russian conference, but said he was "prepared for anything." He was taking along his copy of the NFCUS-sponsored Five Power Peace Pact (FPFP) and hoped to get enough signatures for a Dominion-Provincial Bureau (DPB).

His main business, though, would be to recruit 20 Russian students

Crashes Curtain  
VOL. LXXI NO. 94

What The Hell  
This is the first in a series of humor issues to appear weekly from time to time

—Varsity Staff Photo  
Wax takes his flight in this machine. Built in 1946, it is specially designed for aerobics. Constructed for a southern climate, it will fly to Russia by way of Rio de Janeiro.

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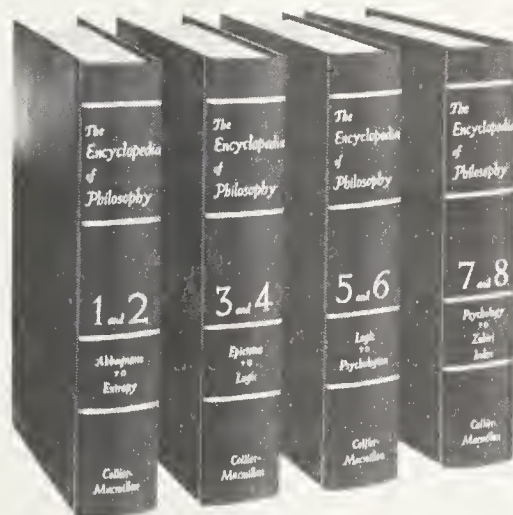
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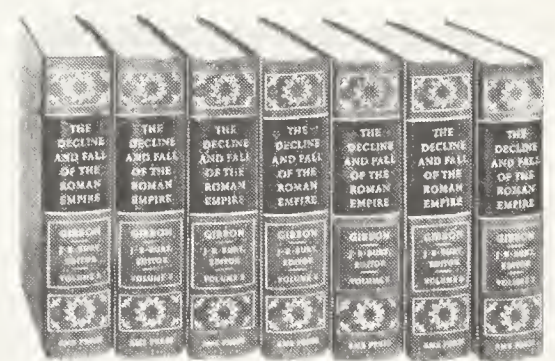
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# THE PURSUIT OF EXCELLENCE

BY DAVID STRANGWAY

**T**HE CENTRAL ISSUE FACING THE UNIVERSITY OF Toronto is quality. How do we sustain and enhance the real areas of excellence? How do we ensure the quality of student life? One must begin with the quality of the academic staff and the student body.

This concern, in our current financial climate, poses even more of a challenge. Many suggestions have been made: reduce standards, admit less qualified students, abolish tenure so that we can immediately respond to the demand for changing fields, or eliminate sabbaticals or increase class sizes even further. The temptation to succumb to such pressures is high.

Instead we must resist them and recognize and strongly support those aspects that will ensure the university's excellence. Hence the theme of this article, which examines the question of the selection of faculty and the selection of students.

Let's examine the typical preparation of a young scholar headed for a career of teaching and research here. The high school graduate must compete to enter university (in some of our programs this requires 75 per cent or more in six grade 13 academic subjects). Four years of intense work as an undergraduate leading to at least a mid-B average follow. The student then competes for a place in graduate school to work on a master's degree, which typically requires two years, often leading to a thesis. In addition to passing examinations, a new form of appraisal based on originality and creativity has started.

At age 24, our hypothetical student applies for admission to a doctoral program and also applies for scholarships and for research and teaching support. Admission depends on both academic record and demonstrated ability to conduct research. In most cases, the next five years will be spent on advanced courses and intense research, assessed periodically throughout the year. All courses (which include a major and two minors) must be passed with at least a B average. At least one minor is taken outside the department. The thesis must be assessed by internal faculty and by outside experts, and must be an original contribution to knowledge. In most instances the candidate will have presented papers before critical audiences and submitted papers for publication in journals. The academic life of continuing assessment and appraisal has started.

Our typical young academic now has a Ph.D., is probably nearing 30 years of age, and is likely in many fields to spend two or three more years as a research associate,

usually in collaboration with recognized experts, involving more research and publication which are again subject to review. At this stage the aspiring young academic may learn about competing for grants. Proposals must be written for appraisal and review by panels of the best in the field before funds will be granted. Most commonly then, a young academic who applies for a university post is in his or her early 30s. The search to fill the position is wide. It isn't uncommon to have 20 or more well-qualified applicants for a single position.

Finally, an academic career is launched, but only on a three-year contract. New courses must be prepared. Teaching evaluations are done annually. The individual's own independent research must be started, papers must be written and talks given at conferences. After a successful three years the young academic may be given a two-year renewal; teaching and research continue. Thus after five years, the time for the tenure decision has come. Every colleague in the department is given an opportunity to comment. Letters are sought from the world's authorities in the field. An evaluation committee is struck to review the teaching record and report to the tenure committee. Another committee reviews scholarship and professional activity.

Thus in the late 30s, the typical young academic, now not so young, is reviewed for tenure and assessed against the discipline's best. This is an "up or out" decision.

Those who survive such a lengthy, arduous process are among the most dedicated and talented people in society. Is it any wonder that we cherish and support them?

I believe that tenure is the single most important element that helps to make and keep a university great. In our difficult financial circumstances we must do everything possible to protect the concept of tenure, if the basic goal of the University of Toronto to remain an institution of excellence is to be sustained.

Nor does the pressure of evaluation and assessment end with tenure. An annual review is carried out by the department chairman and a decision made on the amount of merit pay to be awarded. There are annual teaching evaluations, external reviews of books and papers submitted for publication. There are grant competitions. Assessment is endless both within the university and in the wider community of scholars.

When our academic is in the mid to late 40s the question of promotion to full professor arises. Again, the individual is tested both as a member of the university and of the international community of scholars. Is he or she an outstanding teacher? Has this person an international scholarly reputation?

In spite of the difficulties we face, we must continue to be tough in our assessment and generous in our support. Difficult decisions must be taken when necessary. We must *know* that tenured faculty members are living up to expectations. We must review our practices in granting tenure to ensure that, as active members of the community of scholars, they are tested against that community.

Should we consider breaking existing tenure contracts or stop awarding tenure to our best young academics?

---

*Professor David Strangway is vice-president and provost, University of Toronto.*



The difference between an ordinary university and a great one is the care with which the decision to grant tenure is made. Tenure carries with it all the aspects of academic freedom. By implication there is an element of job security. But a decision to eliminate tenure would cause a serious problem, and, most importantly, would not enable us to compete for and select the best young faculty.

The complement to our staff selection is the admission of students. Our admissions process must have as its goal the selection of those most able to cope with the rigours of the academic programs we offer. We cannot devote our dwindling resources to teaching those students unlikely to do well in the university.

In some parts of the University, the matching of student skills to our programs using a number of indicators has been in use for some time. In engineering, students are now expected to have taken physics, chemistry and three mathematics in grade 13. In addition it is strongly urged that the sixth subject be one such as English or history, in which communication skills are required. Students must achieve an average of about 80 per cent and for some programs such as engineering science the requirement is often nearer 90 per cent. In pharmacy it is necessary to have a high standing in six grade 13 subjects, and to score well on the Pharmacy College Admission Test. Admission to dentistry requires at least 75 per cent in one, two or three years of university preparation

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*Our admissions process must have as its goal the selection of those most able to cope . . . we cannot devote our dwindling resources to those students unlikely to do well in the university.*

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and as is well known admission to medicine and law remain highly competitive.

In other faculties admission requirements are being deliberately raised. Forestry has recently moved from a 60 per cent admission cut-off to 70 per cent. It is interesting to note that enrolment in the program increased with the higher standard and noticeable differences in the classroom have been reported. In many professional faculties grade 13 marks are supplemented by other factors. In architecture, a design portfolio must be submitted; in the Faculty of Music there is a required audition in the performance option. In fact in all fields, admission cut-off levels, subject distribution, and other indicators are continually being reviewed.

The Faculty of Arts and Science on the St. George campus has also recently reviewed its admissions

criteria. At present, a minimum grade 13 average of roughly 75 per cent in six subjects is required. In the past any six grade 13 subjects were acceptable but now a defined range including at least English, mathematics or language, and a selection from other approved subjects is required. This background is, in our view, more appropriate for those planning to proceed to degrees in the liberal arts and in the sciences. A number of grade 13 courses, not originally designed for those planning to go on to university, have been listed as unacceptable as one of the six subjects for admission. Foreign students whose native tongue is not English are required to demonstrate proficiency in English.

The faculty has also committed itself to developing a set of achievement tests. All students will be required to take an English composition test and at least one other. When this system is put in place in 1984 or 1985, admission to the faculty will depend on a combination of grade 13 marks, achievement tests and the file submitted by each student. By using these three indicators we will be able to do a better job of selecting students who can be expected to succeed. Discussions are now under way about admissions to programs so that there will be better matching between admissions and the proposed field of study. Already the faculty has developed a set of programs with required and optional courses. Every student must choose one of these at the end of the first year.

The Erindale and Scarborough campuses have also recently revised their admissions requirements in terms of subject distribution, have moved their admissions cut-off levels from 60 per cent to 65 per cent and are considering further changes in coming years. Moving to this level from the provincial base of 60 per cent has meant that admissions standards for these two campuses are amongst the highest of all Ontario universities. This is an enviable record for these two new colleges reflecting their growing maturity and the growing strength of their faculty.

Admission demand for the School of Graduate Studies is also high and the requirements continue to be stringent. Especially in graduate studies the University of Toronto must continue to be a leader both nationally and internationally. As the largest graduate institution in the country this responsibility compels us to be at the forefront of research, for it is through the training of students at the highest level that advancement in knowledge occurs.

Demand for admission remains high, in large measure because of the quality of the programs and the quality of the student body. We have for a number of years had to limit enrolment. We remain determined that we must not expand at the expense of quality even though our resources are shrinking. Instead the actions we have taken are to ensure that the students who are admitted are the most likely to be successful in our programs.

Where do the alumni fit into all of this? The University of Toronto is ultimately judged by the quality and commitment of those who have been educated here. It is this commitment, evidenced by a strong display of support for the concept of excellence, which will give us the courage to persist in making your university one you will be proud of. It is your endorsement of our efforts which will prevail. ■



# TWO NEW CONSTITUENCIES ORGANIZED FOR ACTION!



**T**WO NEW CONSTITUENCY ALUMNI associations have recently joined the more than 30 associations already operating on campus and off.

The Ontario Institute for Studies in Education (OISE) held an organizational meeting for its new alumni association on Nov. 23. Forty-five members attended and a number volunteered to serve on the executive committee pro tem. President pro tem is Bill Marcotte (Ph.D. OISE '80).

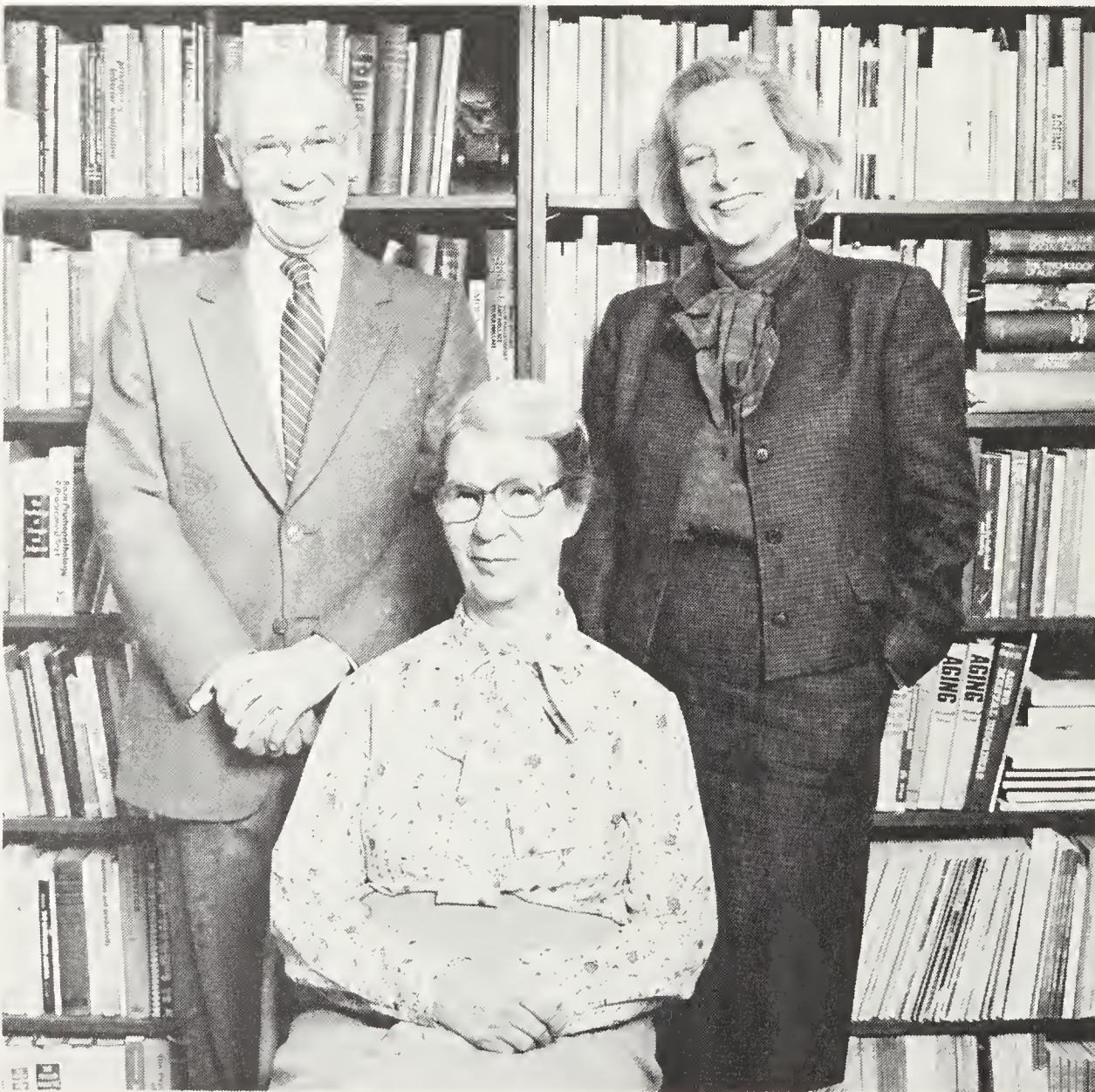
A committee composed of Dr. Mary Jane Ashley ('63), director of the Division of Community Health, Dr. Ted Best ('44) of the public health branch of the Ontario Ministry of Health and president of the alumni, and Dr. E.R. Langford ('60) of

the faculty have been working hard to revitalize the School of Hygiene Alumni Association. After a number of planning sessions they held a meeting at McGill University on Nov. 16 during the annual meeting of the Canadian Public Health Association. The meeting was very well attended and proposals to expand membership by including alumni who hold any of 13 certificates or diplomas related to the field were approved.

A new name for the association which would be more descriptive of its composition was discussed. All members have been sent a newsletter and canvassed for their opinions regarding programs, methods of supporting the division and the university, and a suitable name.

## NOVEMBER 11, 1982

AN UNUSUALLY LARGE CROWD (ESTIMATES ranged from 600 to 1,000) assembled at Soldiers' Tower for the Alumni Association's Act of Remembrance on November 11. The brief but moving service was conducted by the Rev. Stephen Booth, chaplain of Hart House, assisted by the Hart House Chorus under the direction of John Tuttle, university carillonneur Heather Spry, Keith Mayo of the Faculty of Music (who sounded the Last Post) and the cadets of the 17th Upper Canada College Rifles Cadet Corps. SAC vice-president Lisa Bodnarchuck read from Micah IV,



*The Senior Alumni recently contributed \$2,300 to the Wilson Abernethy Memorial Endowment Fund, bringing the total to \$10,000. Established in honour of the late Wilson Abernethy who founded the Senior Alumni, the fund is used to buy books for the gerontology program. Gordon Romans, chairman of the Senior Alumni and alumni member of Governing Council, and Mary Coburn (seated), chairman of the Senior Alumni's gerontology committee, are seen with Prof. Blossom T. Wigdor, director of the gerontology program, upon the occasion of the presentation of the cheque.*



and Martin Holysh, secretary of the Hart House council, read *To David*, a poem by Robert P. Thompson, (Ph.D. zoology '63) subtitled, "Lines written after reading the list of war dead on the wall of the Soldiers' Tower at the University of Toronto". Wreaths were placed by Chancellor George Ignatieff for the university, UTAA president Ed Kerwin for the alumni, Lisa Bodnarchuck for the students, and James Gill of the 67th (Varsity) Battery for Old Comrades.

On the same day, the Young Alumni Association paid its own tribute to its predecessors by sponsoring an evening of discussion on the hazards of nuclear arms. More than 200 attended to hear the Very Rev. Lois Wilson, former moderator of the United Church of Canada; Rod Byers, director of the research program on strategic studies at York University; Paul McRae, Liberal member of parliament; and John Anderson, deputy minister in the Department of National Defence.

## JOB REGISTRY EXTENDED

AS REPORTED LAST ISSUE, ALUMNI WHO have been away from the university for more than two years will no longer be eligible for the permanent job registry of the Career Counselling and Placement Centre. At the October meeting of Governing Council, graduate student representative Lois Pineau questioned whether this was quite fair to graduates who might be seeking their first permanent jobs more than two years after graduation. She cited a student who had completed a three-year contract with CUSO. At the November meeting of the Committee on Campus and Community Affairs, Vice-President William Alexander reported that any member of the alumni who was seeking a first permanent position and had a special reason for delaying this first entry into the work force would be able to request an interview with a member of the staff of the centre. Each case will be dealt with individually.

## A TIMELY PROGRESS REPORT

AS EXPECTED, THOSE BEAUTIFUL U of T mantel clocks have had wide appeal and profits for UTAA have now passed the \$24,000 mark. Fund-raising chairman Ted Wilson (Forestry '59, M.Sc.F. '70) and his committee are hoping for even greater success since proceeds are used to build a capital fund with the interest

going to such projects as the remodelling of Convocation Hall to accommodate the disabled. The George Cedric Metcalf Charitable Foundation has made a substantial contribution to the project, UTAA gave \$4,000 last year and to date \$29,000 of the \$33,650 has been raised.

More concern for the disabled comes from the Physical-Occupational Therapy Alumni Association which has set up a special account through the Varsity Fund which will accumulate funds for two long-term projects. Phase I of the campaign will raise the necessary money to make the departments at 256 McCaul Street accessible for wheelchairs. Phase II will improve the fourth and fifth floors of the building and will include a new research laboratory.

A tip of the hat also to Bell Canada which has equipped various pay phones on all three campuses with amplification adjustable handsets for the hearing impaired. Bell has provided these without charge as part of its program for disabled people.

A "visual ear" for the hearing impaired who cannot use regular telephone lines has been installed by U of T in the office of the co-ordinator of services to the disabled.

## INFORMING THE INFORMERS

DIRECTORS OF UTAA PLAY A VITAL ROLE in alumni communications — they are expected to keep UTAA informed about constituency matters and their constituencies informed about the activities and concerns of UTAA and the university. The monthly meetings of the directorate are, therefore, excellent opportunities for various sections of the university community to inform and exhort some active and reliable messengers.

The October meeting included a panel discussion devoted to the increasingly critical subject of fund raising. Speakers

were President Goldwyn French of Victoria, Principal Peter Richardson of University College, Principal William Dunphy of St. Michael's College, Dean Gordon Slemon of Engineering, and Varsity Fund chairman Brian Buckles.

In November Vice-President Business Affairs Alex Pathy laid to rest a number of myths about the bureaucracy known as Simcoe Circle. Specifically he pointed out that for the size of the university and the responsibilities it bears, the central administration is understaffed by business standards.

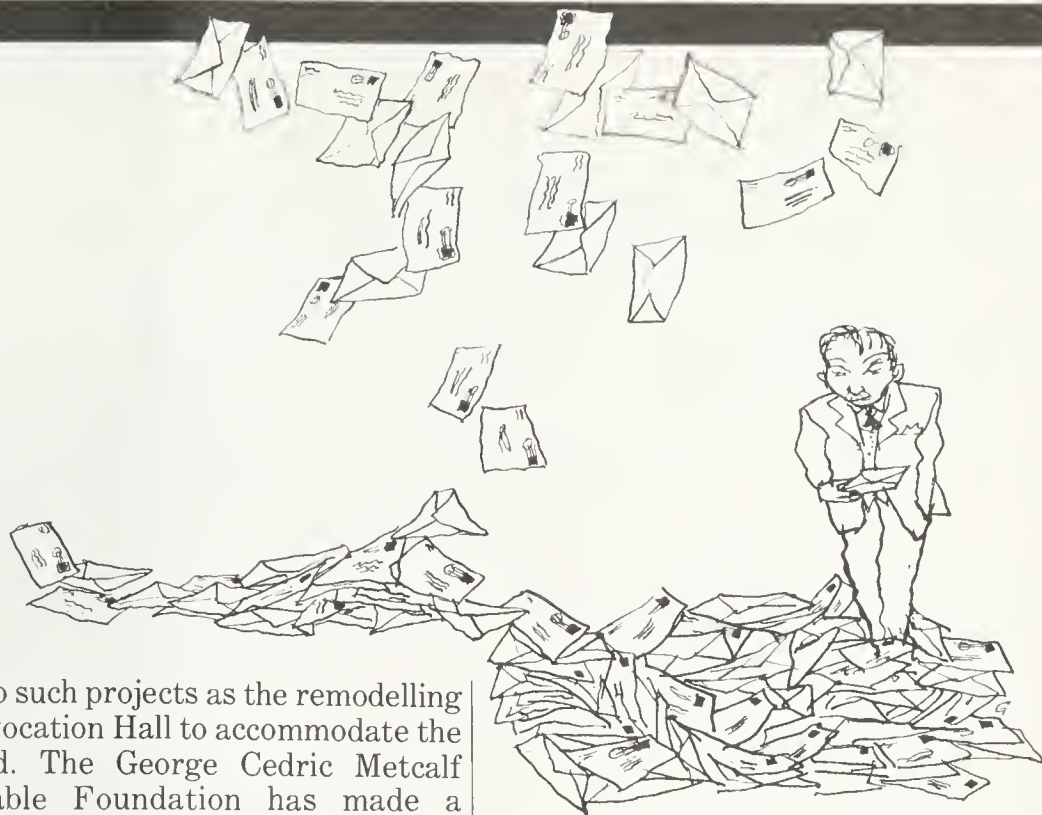
## Alumni College Day

Begin the Spring Reunion weekend with an intellectual homecoming at Alumni College Day on Friday, June 3, and discover what is happening in research and education today on the campus. The program will have two sessions, morning and afternoon, each with a one-hour presentation followed by a question and answer period.

One of the speakers will be Dr. Edward Llewellyn Thomas, associate dean of undergraduate affairs in the Faculty of Medicine, whose field is biomedical engineering. The second speaker is still to be confirmed.

Sessions will be held in the media room of University College, beginning at 10 a.m. The fee of \$10 per person includes coffee breaks and luncheon.

For further information and to get on the mailing list for Alumni College Day, please write or telephone Bill Gleberzon, Department of Alumni Affairs, University of Toronto, Toronto, M5S 1A1; (416) 978-8991.





## ELECTION OF CHANCELLOR

On behalf of the College of Electors, the chairman, the Hon. Mr. Justice Joseph Potts, has issued a call for nominations for the position of Chancellor at the University for a term of office commencing July 1, 1983 and ending June 30, 1986.

*The University of Toronto Act, 1971* stipulates that the Chancellor must be a Canadian citizen.

The present Chancellor, Dr. George Ignatieff, is eligible for re-election. The previous three chancellors were the Hon. Pauline M. McGibbon, Dr. Eva W.M. Macdonald and the Very Rev. Arthur B.B. Moore.

The Chancellor generally has three main duties: the granting of all degrees at the spring and fall convocations; representing the University to the outside community, particularly alumni groups; and chairing the Honorary Degrees Committee and being an *ex officio* voting member of the Governing Council and its standing committees. To perform these duties requires six to eight hours per week during the academic year. The Chancellor's presence is required daily during the convocation periods.

Nominations must be in the hands of the secretary of the College of Electors by 4 p.m. on Friday, March 25.

### Reminder — Alumni Nominations for Governing Council

On April 18, the College of Electors will meet to elect three alumni representatives to the University's Governing Council, to serve terms from July 1, 1983 to June 30, 1986.

A candidate must be a Canadian citizen, an alumnus or alumna of the University not a member of the staff or a student in the University, and must be willing to attend frequent meetings of the Governing Council and its committees.

The deadline for receipt of nomination forms is 4 p.m. on Friday, Feb. 25. Candidates will be invited to meet with the College of Electors on April 18. (Please note change in date.)

*Further information and nomination forms may be obtained from Susan Girard, Secretary, College of Electors, 106 Simcoe Hall, University of Toronto, Toronto, M5S 1A1; telephone (416) 978-6576. All nominations will be held in confidence.*



*Ed Kerwin, president of UTAA, helps John Whitten, chairman of Governing Council, don his new gown for Convocation on Nov. 24.*

## A MOST SUITABLE GIFT

AT ITS MEETING IN THE CROFT CHAPTER House of University College on Nov. 16, the directorate of UTAA voted to provide the chairman and eight alumni governors of the Governing Council with special gowns to be worn for Convocation during their terms of office. No sooner said than almost done. At a ceremony held in the chairman's office a few minutes before Convocation on Nov. 24, UTAA president Ed Kerwin presented the first of the gowns to the current chairman, John Whitten. The gowns will be passed by chairmen and governors to their successors. Continuing a practice begun in June 1982, alumni were asked to act as beadles and guides for fall Convocation. Beadles were chosen from the directorate of the UTAA and the Young Alumni Association supplied guides.

## Canadian Perspectives, Spring 1983

This academically-oriented lecture and discussion series for senior alumni and friends, now in its sixth year, will be presented in two sessions: Tuesdays, April 5 to May 3 from 9.30 a.m. to 12 noon; Mondays, April 11 to May 9 from 1.30 to 3.30 p.m. Both sessions will be in the media room (179) of University College. Topics and lecturers are still to be confirmed.

Registration fee, which includes one luncheon, is \$15 per person per series. Enrolment is limited and places are filled quickly; it is, therefore, advisable to respond as soon as possible.

*For advanced booking or to get your name on the Canadian Perspectives mailing list, please get in touch with the Department of Alumni Affairs, telephone (416) 978-8991.*



## HELLO AGAIN ... AND AGAIN ... AND AGAIN

ALUMNI AFFAIRS IS RECEIVING COMPLAINTS about multiple solicitations for contributions to the Varsity Fund and not only understands the annoyance of those who feel they're being pestered but is anxious to do something about it.

The problem is, briefly, that the Varsity Fund is constituency based. This means that if you are a member of two constituencies, e.g., St. Michael's and Law, you may well find that both are entreating your support. If you give to both, you will be content to get both appeals. But if you wish all of your support directed to only one of your constituencies you are going to be annoyed when you keep hearing from the other.

The solution to the problem is simple. Just write to Alumni Records, Department of Alumni Affairs, University of Toronto, Toronto, M5S 1A1 and let them know your preference.

## THE DIRECTOR SPEAKS HIS MIND

IN AN OUTSPOKEN GUEST EDITORIAL in *the newspaper*, a weekly paper at the university, director of alumni affairs Bert Pinnington laid it on the line to the university community — alumni support begins with a memorable undergraduate experience. Noting that undergraduates who are treated with impersonal indifference become indifferent alumni, Bert indicated his conviction that the current low level of alumni support (particularly among recent graduates) is an indication that the university is not telling its story clearly. Constituencies which work hard at establishing an identity among their students and making them feel important are the ones which command support from their alumni.

## IN MEMORIAM

THE DIRECTORATE OF THE UTAA HAS been much saddened by the deaths of two experienced and valued members. Delbert Hoare (Medicine '28) was a longtime member who was active in both the Spring Reunion Committee and the Faculty Liaison Committee. Pamela Perrin (Victoria '52, M.A. '62) devoted her very considerable talents to the same committees. Alumni who give so generously of themselves to the university are not easily replaced. They will be missed.

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# TRENDY TOPICS & RADICAL PERSONS

**T**HROUGH THEIR POSITIONS AT OISE, Professor Mary O'Brien and her associates do have extensive influence in Ontario on the question of exploitation of women. Their thinking on basic human equality should be of major concern to all the women of the province.

If their views were accurately presented by Judith Knelman in *Radical Persons* in the Nov./Dec. issue it would seem that Professor O'Brien *et al.*, like most feminists, make no distinction between basic and subsidiary freedoms.

Equality in being human exists when both men and women have equal opportunity to exercise the two qualities peculiar to humans: the ability to seek out truth and the ability to make responsible decisions. Men and women have this built-in capacity of mind and will.

Anne Kennedy  
Kingston

I take a strong objection to a statement by Pamela Cornell in *Campus News* in the Nov./Dec. issue that women's and native studies and the socialization of children are "trendy topics" and not an area of legitimate academic research.

The reason these topics have been singled out as "strategic" areas by the SSHRC is precisely because until very recently they have been shamefully neglected, whereas any rational and just social policy requires a basis of an appropriate, scholarly research.

I disagree with Dean John Leyerle that the emphasis placed on these studies is "the harbinger of a new ignorance." On the contrary, the pursuit of social sciences research which virtually excludes the ex-

perience and achievements of more than half of the human race is symptomatic of abject ignorance. It is high time to redress the balance and deal with the realities of the human condition.

K.J. Cottam  
Ottawa

It was with a sense of irony that I read two items in the Nov./Dec. issue. Judith Knelman's *Radical Persons* notes that "women's history really has been hidden" and describes current efforts to make women more visible. Two pages later, I read that the Canadian Institute for Advanced Research is being established to counteract the Social Sciences and Humanities Research Council's recent decision to earmark budget increases for research on topics such as women's and native studies and the socialization of children. According to the article these "trendy topics" are a response to "shrillness in the electorate" and CIAR is being formed to "allow excellence to dominate over regional pork-barrelling."

I wonder how the article would have read if the SSHRC increases had been earmarked for petroleum geology, engineering, and computer sciences (or philosophy, political history, and urban geography) — none of which is "trendy",

Letters may be edited to fit available space and should be addressed: Graduate Letters, Department of Information Services, University of Toronto, Toronto, M5S 1A1.

i.e., having come to be recognized as a new, unexplored research area requiring major funding encouragement and support. There would be no need to respond to "shrillness" since it would be major, established academics, their professional associations, and their respected faculties who would do the lobbying — quietly and in the best of taste and of the "old boy" tradition. Nor could research in such subjects ever be anything but excellent, based on the best scholarly methods and not tainted, heaven forbid! by any suggestion of regional pork-barrelling.

B.A. Riley  
Ottawa

Quickly shedding the titular intimations of equality, *Radical Persons* almost from the outset promulgates female superiority. Men, according to an "expert" clearly endorsed by author Judith Knelman, "made the world." And absolutely botched it. Besides denying what are in other contexts not unfairly called "women's contributions" such an argument sets up precisely the sort of biblical dualism, with a male creator juxtaposed *vis à vis* a struggling, chosen sect (in this case, a sex) to which feminists have objected so vehemently.

Creation, then, is anathematized. Being socially oppressed is next to godliness. But this is not all. Women, supposed prostrate due to this oppression, will inexplicably retain their total virtuousness *ad infinitum*, long after the situation which produced the virtue has been done away with, if not reversed, by means of "revolution". Logically, the argument

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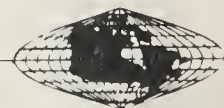
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runs: women are on the side of the angels. They are superior because they are superior.

Anyone with a smattering of historical knowledge could cite examples which prove this thesis empirically false as well as logically meaningless. Powerful women have not been and are not known for their non-violence relative to their male counterparts. In the words of late, ardent feminist John Lennon: "Big Sister, just wait until *she* gets here!" Or, put simply, power corrupts persons.

John McQueen  
Saskatoon

I was not pleased to read that "increases must go toward research into such trendy topics as women's and native studies and the socialization of children . . ." in Campus News of the Nov./Dec. issue.

It was not made clear whether the word trendy was the opinion of Pamela Cornell (staff writer) or the government "on a political response to shrillness in the electorate" but in any case, the word is truly objectionable.

It was not made clear what cozy projects Dr. Mustard intends to get involved with at the Canadian Institute for Advanced Research but since women, children and Canada's first people do not come first, their priorities are no doubt male identified.

Aside from wondering what those priorities will actually turn out to be, I was saddened that John Leyerle (dean, School of Graduate Studies) thinks that research into half the human race, because the government wants to earmark increases for it, is "the harbinger of a new ignorance."

Come on guys, it's time to share your toys.

Patricia Glenday  
Toronto

The editorial of the Nov./Dec. issue emphasizes that modern technological efficiency poses a threat to the inherent functions of the human mind. You need not be overly concerned because "reflection and the pursuit of creativity" appears to be the ultimate quest of *The Graduate*. The magazine itself is proof enough that "anarchy and imprecision" prevails in the right proportion and in the greatest fashion.

Keep up the good work. Enclosed is a small token to aid "imprecision" a little longer.

Suzette Benjamin  
Scarborough

Your editorial comments on Linotypes evoked a lovely wallow in nostalgia. As women's news editor of *The Varsity* (even the offices were separate in 1934), I always enjoyed my occasional stints as night editor. Hammering out the stone proof wound up a glorious inky night, with linotype machines clattering, and coffee and student reports on the boil. Then I'd drop in at grandmother's, which was handier than home, for a couple of hours of sleep and a hearty breakfast before a nine o'clock lecture.

Grandmother's disapproval, "young girl staying up all night with those men linotypers", made me feel truly emancipated. I wonder how she would have reacted to the silicon chip?

Enclosed is a thank you subscription cheque.

Florence King Blackwell  
Toronto

Your editorial in the Nov./Dec. issue unwittingly illustrates your thesis that the new typesetting technology, while faster than the old Linotype, may seduce editors into neglecting the skills of their craft.

The inventor of the Linotype, as all true Linotype aficionados know, spelled his name Mergenthaler, not Merganthaler.

Rest assured that "anarchy and imprecision" will prevail for a long time, the silicon chip notwithstanding.

Jeffrey D. White  
Islington

Ouch!  
Editor

Pamela Cornell has done it again! Her profile of Father John Kelly in the Nov./Dec. issue of *The Graduate* was a gem. To capture the spirit and character of the man in a comparatively short article was nothing short of a *tour de force*.

I find it highly gratifying to see Father Kelly receiving the kind of acclaim he so richly deserves. A man of many and varied talents, he has never used those talents for self-aggrandizement but always in the service of others and to promote the values to which he is so deeply committed. To cite but one example: the Toronto School of Theology will be forever in his debt for his unstinting support over the years and especially for his work on the TST board of trustees. His wizardry in the area of finance — a man with a vow of poverty! — has been a constant source of amazement to the businessmen on the board.

Yet for all his remarkable natural



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talents, Father Kelly has always kept his priorities straight — his priesthood has always come first. May his tribe increase!

*John Hochban, S.J.  
Vice-President and Registrar  
Regis College*

We thoroughly enjoy *The Graduate*, especially the pictures which frequently show us what our colleagues of the forties look like today. When we saw a picture of our former professor, Reginald Haist, and former fellow graduate student, Donald Fraser, in the Sept./Oct. issue, we were reminded that we hadn't responded to your earlier request for voluntary subscriptions.

We hope *The Graduate* is not a victim of the inevitable budget cuts. It serves a real purpose in renewing our interest in the U of T.

*Desmond R.H. Gourley  
Marjorie Curl Gourley  
Norfolk, Va.*

If everything in this world would be as punctual as the arrival in my mailbox of

*The Graduate*, predictability would take the place of chaos.

The continuing high standard of your publication is a pleasure to behold and I look forward to each copy. It keeps me in touch with U of T which I have revisited many times since my graduation from dentistry in '48.

*Harry Rich  
Sydney, Australia*

Learning to live with the land and a herd of dairy goats, contact with "the outside" is maintained through journals. *The Graduate* is one of the core group.

Thank you.

*Jerie Davidson*

I was intrigued to read in the Sept./Oct. issue that Donald Ivey made a rapid swing through the branches in May. A case of spring fever in the academic jungle?

*H. Bruce Collier  
Edmonton*

Waited so long for this puzzle, it came two weeks ago, I did what I could and sent it to my sister in Toronto who finished it and who noticed that the deadline was Oct. 31. She sent it back via a passenger on Air Canada and I'm mailing it in anyway, hoping that there was some delay in mailing this issue out.

Just hope we win. Would love that book.

*Nona O'Neil  
Saint John*

*From time to time distant readers complain that they don't receive The Graduate in time to meet the deadline for the crossword puzzle. We'd like to reassure those of you who have such problems of two things. First, we take a decidedly relaxed view of the "deadline" which exists only to remind you not to delay. In fact we make the draw two days before presstime — a difference of several weeks. Second, a rather curious fact: while we receive entries from Australia, Kenya and Hong Kong as well as from the U.K. and the United States, we have never, to the best of our recollection, received a valid entry too late for inclusion in the draw.*

*Editor*

## **An Invitation To Submit Nominations For The \$75,000 Ernest C. Manning Awards**

The Ernest C. Manning Awards Foundation is seeking nominations for its \$75,000 **1983 Award**.

The Foundation is a national, privately funded non-profit organization, formed to encourage, nurture and reward innovation by Canadian people.

A Selection Committee will choose a person who has shown outstanding talent in conceiving and developing a new concept, process or product of potential widespread benefit to Canada. Of special interest are nominations from the fields of biological sciences (life); the physical sciences and engineering; the social sciences; business; labour; law; and government and public policy.

**The deadline for nominations for the 1983 Award is March 31, 1983.**

**For further information, or to acquire a Nomination Form, please write to:**

**Mr. George E. Dunlap, Executive Director,  
Ernest C. Manning Awards Foundation,  
#2300, 639 - Fifth Avenue S.W., Calgary, Alberta T2P 0M9**



# ACADEMIC RETREAT CONSIDERS TENURE

**W**HEN UNIVERSITY VOICES ARE raised in chorus to sing the underfunding blues, there is an inevitable refrain: "Maybe we should do something about tenure."

Tenure is expensive; it limits the reallocation of scarce resources. And tenure is risky; once the employer has guaranteed an individual's job, what reciprocal guarantee is there that the individual won't just sigh with relief and slack off? Scarcely the best return on the academic dollar.

Predictably, the issue was thrashed out when all the University's principals, deans, and department chairmen gathered on Oct. 28 for a day-long retreat at Toronto's Boulevard Club. If tenure were abolished, they agreed, a *de facto* tenure system would probably emerge, similar to that practised in government or in large corporations but without the added consideration of an up-or-out decision at a specified point in the career. However they did acknowledge that procedures associated with granting tenure ought to be strengthened.

It seems that the success rate of achieving tenure at U of T approaches 95 per cent, while at many universities, the success rate is closer to 50 or even 33 per cent. Perhaps, it was suggested, there should be a review of a tenure recommendation when there are two or more negative votes from members of the committee appointed to assess an individual's performance and potential. It was further suggested that, once tenure had been granted, a series of zero merit awards should be necessary to support a case for dismissal.

Closing units and terminating staff — both academic and non-academic — was generally considered undesirable because the cost of potentially substantial buy-out payments could exceed any savings effected.

Returning to the root of their problems — chronic underfunding — the academic administrators talked about establishing a clearcut role for alumni in lobbying both government and the private sector on the university's behalf. One idea is to appoint boards of visitors, drawn from alumni of the various disciplines and assigned the task of scrutinizing programs and strengthening external links.

Since alumni are unlikely to give a damn unless their own experience at U of T was "memorable", the administrators agreed that "renewed attention is needed to improve and vitalize undergraduate teaching... somewhat eclipsed in the last decade by the very productive emphasis on graduate teaching and research."

To this end, the Faculty of Arts and Science has now established a task force on the undergraduate experience. With up to 20 members, including "ample student representation", it will investigate such topics as counselling services and program enrolment procedures. It will also consider ways of improving the geographical mix of students. At present, about 70 per cent come from Metro Toronto.

## KELLY FOUNDATION ESTABLISHED

"A UNIVERSITY COMMUNITY... GIVES A person intellectual, cultural and moral roots, without which we are mere changelings buffeted about by whimsy, narrowness of spirit and loss of discipline and goodness," Rev. John Michael Kelly said when he received his honorary doctor of divinity from the University of St. Michael's College on Dec. 4 at St. Basil's Church.

The degree was in recognition of Father Kelly's considerable accomplishments as president of St. Mike's for 20 years and as director of alumni affairs for the past four. To mark the occasion, a group of Kelly's friends took out their chequebooks and came up with more than \$100,000 to "seed" the Father John Kelly CSB Foundation.

The charter, the corporate seal, the minute book, the term deposit statement, and the bank book were all presented to Kelly at a small reception on Dec. 2 by Dr. William James, who had just celebrated his 88th birthday the previous day.

As sole officer of the foundation, Kelly will be able to designate the money for any purpose he chooses within the college.

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# THANK YOU!

to the many readers who responded to our invitation to become voluntary subscribers to *The Graduate*. To those who intended and forgot, the invitation is still open. Send \$10 to The Graduate, Department of Information Services, University of Toronto, Toronto M5S 1A1 and mark it voluntary subscription.



## APPLEBAUM HONOURED BY CONSERVATORY

THE CREATIVITY INHERENT IN THE Canadian people is a resource more valuable than oil or gold or forest products, Louis Applebaum told a convocation audience on Nov. 27. The composer and arts administrator had just received the first honorary associateship of the Royal Conservatory of Music ever to be awarded.

In the news recently as co-chairman (with writer Jacques Hébert) of the federal cultural policy review committee, Applebaum helped write the blueprint for cultural development that has come to be known as the Applebert report.

"We want the arts to flourish in freedom and artists to work under fewer economic restraints because they have been too long undernourished, ignored and misused," he said in his convocation address. "It is artists, especially the prime creators, who realize our dreams and ideals, who can actually and accurately reflect our true character, our vitality or our dullness, our greatness or our insignificance, our awareness or our blindness, our ambitions as Canadians or our

indifference to ourselves and our place in the world. We *must* believe that what we have to say and what we can produce is both worthwhile and of concern to us all."

For those not destined to make their careers in the arts, Applebaum says training in music and other art disciplines is important because it provides "an invaluable basis for on-going learning and for making discerning judgements."

Applebaum was described by Principal Ezra Schabas as "a major force in the development of artistic life in this country for 40 years." Now 64, the honorary graduate began his career in 1942 as music director for the National Film Board. Subsequently, he has been music director of the Stratford Shakespearean Festival, music consultant to the CBC, a key planner of music for the National Arts Centre, and executive director of the Ontario Arts Council.

Throughout, he has continued to compose without let-up — writing fanfares and incidental music for Stratford, scores for the National Ballet, a musical comedy, orchestral, band and choral works, as well as more than 600 film scores — several of which have won awards and one of which was nominated for an Academy Award.

## PHARMACISTS CAN GET LATEST INFO BY PHONE

THE SCHOOL PRINCIPAL HAS JUST CONFISCATED some tablets from a grade 10 student. Concerned about what they might be, she stops by her local drugstore on the way home from work.

The pharmacist doesn't recognize the tablets as anything she has ever seen before but thinks they might be those "counterfeit amphetamines" the newspapers said were turning up in the U.S. With relatively mild stimulants (often found in over-the-counter cold preparations) as their active ingredients, they were typically being marketed through mail order ads in magazines. Most of the companies responsible have since lost their licences.

A year ago, the pharmacist would have been left wondering if the confiscated tablets were these so-called legal stimulants — which might be taken in a dangerously large dose to bring about the desired "high" — but these days a quick phone call to U of T's drug information centre will usually provide the needed answer.

Opened in April and staffed by three Faculty of Pharmacy graduates, the drug information centre has ready access to all the latest data to help Ontario's estimated 6,000 pharmacists keep up with on-going developments in drug therapy. Pharmacists anywhere in the province can call in on the centre's toll-free line and have their questions answered promptly, either over the phone or by mail. The centre has information on drug interactions, adverse drug reactions, new drugs, foreign drug identification, appropriate dosages, and other such problem areas.

Besides offering practising pharmacists information, staff at the centre are eager to hear from them about any unusual drug information or experiences, such as "unique" adverse reactions.

The centre averages about 50 calls a day. About half relate to the availability of new drugs or to the domestic equivalents of foreign trade names. All but about 20 per cent of the calls can be answered within 15 minutes. Some questions might be referred to more specialized agencies, such as the Addiction Research Foundation, a regional poison control centre or, for questions involving legislation, to the Ontario College of Pharmacists.

The drug information centre is a three-year pilot project established with Update funds, alumni contributions, individual donations by Ontario pharmacists, by their professional organizations, and by pharmaceutical companies.

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## KENNETH TAYLOR SCHOLARSHIP AWARDED

CANADA'S MOST CELEBRATED DIPLOMAT, Kenneth Taylor (Victoria, '57), visited the university Nov. 29 to present a scholarship — newly endowed in his name — to the fourth year graduating student with the highest average in international relations. The \$250 Ambassador Kenneth Taylor Award was established by readers of the Long Beach, California, *Independent Press-Telegram* in appreciation of the exploit that shot Taylor's name into prominence and endeared him to the American public.

In 1979, when Iranian terrorists seized the U.S. embassy in Tehran and were holding the occupants captive, six Americans managed to escape. Taylor, then Canada's ambassador to Iran, was responsible for hiding the six and providing them with Canadian passports so they could leave the country inconspicuously.

The Tehran hostage crisis ended happily but it left Taylor with a gloomy outlook on the future of diplomacy.

"The whole system of diplomatic representation is under siege . . . from terrorists . . . bargaining human lives for ransom while playing with the world's conscience," Taylor told his audience at Hart House.

"A number of countries are not prepared to accept the rules of diplomacy that have provided the cornerstone for negotiation since the fifteenth century . . . Some (leaders) actually employ and view terrorism as a tool of foreign policy and are prepared to sacrifice all, even to the extent of a scorched earth policy, to achieve their ends."

Although Taylor himself now enjoys a relatively tranquil posting as Canada's consul-general in New York, he remains mindful of the dangers diplomacy can entail. During the past decade, U.S. diplomatic missions have suffered 260 significant terrorist attacks and five U.S. ambassadors have been killed. The Turkish diplomatic corps has lost 12 of its members to violence in the past seven years.

Volatile though a political situation might be, Taylor believes there should be some guaranteed minimum of security against attack for the persons and property of diplomatic missions.

The first recipient of the Taylor award is William Robson, 22, president of the Students' International Relations Society in 1981 and currently an academic researcher in the Department of Economics. The award was instituted on a one-time-only basis but it will continue, funded in the future by Trinity College where the international relations program is based.

The establishment of three other scholarships, to be presented for the first time next year, was also announced that night. To the third year student with the highest average in international relations will go a \$500 scholarship, funded by Trinity and named after the program's founder, George Ignatieff — former diplomat and Trinity provost, and now the University's chancellor.

The top second year student will receive a \$500 scholarship established in honour of John W. Holmes, former assistant under-secretary of state for external affairs and former Claude T. Bissell visiting professor of Canadian-American relations. Both the Bissell chair and this new scholarship are funded by the

*Honoured guests at a special International Relations evening were (left to right) Chancellor George Ignatieff, William Robson, first recipient of the scholarship named for Kenneth Taylor, and former Bissell visiting professor John W. Holmes.*

Associates of the University of Toronto, based in New York and representing alumni living in the U.S.

The associates have also established a \$2,000 scholarship for an American citizen with the highest average in the first year of the international relations program.

## Preparation for Retirement Living

The Senior Alumni course offering ideas and suggestions for making the most of retirement and adjusting to the changes that retirement brings will be presented again in a series of seven lectures on Tuesday evenings from March 29 to May 10 at 162 St. George St. Topics to be discussed will include adjustment to retirement, making the most of your money, housing, community resources and the pleasure of leisure. Fee for the series is \$20 per person. Cheques should be made payable to UTAA — Senior Alumni.

*Information and registration: Department of Alumni Affairs, University of Toronto, Toronto, M5S 1A1; (416) 978-8991.*



# LAWYERS UNDER SEIGE, REASON & UNREASON

## LECTURES

### **Reason and Unreason: The Problem of Imagination in Modernity.**

*Thursday, Feb. 3.*

Prof. Allan Bloom, University of Chicago; Wiegand Foundation series on Irrationality in Western Society. Auditorium, Medical Sciences Building. 8 p.m.

*Information: Faculty of Arts & Science, 978-3391.*

### **The 49th Parallel: Example for Whom?**

*Thursday, Feb. 3.*

### **The North American Age in World Politics and After.**

*Thursday, March 10.*

Prof. W.T.R. Fox, Columbia University; 1982-83 Claude T. Bissell visiting professor of Canadian-American relations; final two in series, "North America in World Politics". George Ignatieff Theatre, Trinity College, Devonshire Place. 8 p.m.

*Information: Centre for International Studies, 978-3350.*

### **The Theory and Practice of Human Betterment: Riches and Peace.**

*Thursday, Feb. 10.*

Prof. Em. Kenneth E. Boulding, University of Colorado; Snider visiting lecturer at Scarborough College. Details to be confirmed.

*Information: Community Relations, Scarborough College, 1265 Military Trail, West Hill, M1C 1A4; 284-3243.*

### **U.C. Lectures in Peace Studies.**

*Thursday, Feb. 24.*

Prof. Anatol Rapoport, Institute for Advanced Study, Vienna.

*Thursday, March 24.*

Prof. Seymour Melman, Columbia University.

Final two in series of six public lectures offered by U.C. and co-sponsored by

Science for Peace to provide understanding of possible contributions of scholarship to the advancement of peace. West Hall, University College. 8 p.m.

*Information: University College, 978-3184 afternoons only.*

### **The Convergence of the Sciences: Self-Organizing Systems in Physical Chemistry, Biology and Social Sciences.**

*Monday, Feb. 28.*

Prof. Ilya Prigogine, Université Libre de Bruxelles and University of Texas, Austin; School of Graduate Studies Alumni Association series. Auditorium, Medical Sciences Building. 7.30 p.m.

*Information: Institute for Environmental Studies, 978-5341.*

### **The Church Today: Religious Identity and Social Responsibility.**

*Monday, Feb. 28.*

Prof. Francis Fiorenza, Catholic University of America; J.M. Kelly theological lecture. Brennan Hall, St. Michael's College. 8 p.m.

*Information: Alumni Office, St. Michael's College, 921-3151.*

### **Mind and Matter.**

*March and April.*

Annual series presented by Alumni of Victoria College, Tuesday and Thursday evenings at 8 p.m. in March (except school break week) and first week of April at Victoria College. Tuesdays: Series I, Nations in the news; Series II, Life in community in medieval and renaissance times. Thursdays: Series III, Money management; Series IV, Hollywood in black and white (films). Fees: series single \$30, double \$50, senior citizens \$15; guest fee per lecture \$6, students \$3.

*Information and registration: Alumni of Victoria College, 978-3813.*

### **Trade at Ebla.**

*Wednesday, March 16.*

Prof. Frances Pinnock, University of Rome and the Italian archaeological mission at Ebla; part of special symposium on Ebla to be held at U of T in March. Auditorium, Medical Sciences Building. 8 p.m.

*Information: Society for Mesopotamian Studies, 978-4769.*

### **From Observers to Participants: The Transformation of 20th Century Science.**

*Thursday, March 17.*

Prof. Stephen Toulmin, University of Chicago; School of Graduate Studies Alumni Association series. George Ignatieff Theatre, Trinity College, Devonshire Place. 7.30 p.m.

*Information: Faculty of Library & Information Science, 978-3202.*

## CONFERENCE

### **Lawyers under Siege: The Public Interest and the Legal Profession.**

*Thursday, Feb. 3 and*

*Friday, Feb. 4.*

Annual conference on law and contemporary affairs. Topics will include regulation of the profession, advertising and specialization, access to the law.

*Information: Faculty of Law, 978-6371 Monday-Friday 10 a.m. to 4 p.m.*

## EXHIBITIONS

### **Scarborough College.**

*Jan. 24 to Feb. 12.*

Exhibition in conjunction with medieval colloquium.

*Feb. 22 to March 11.*

Anne Leon/Marlene Moore, ceramics/prints.

*March 14 to April 1.*

Susan Schelle, installation.

Gallery hours: Monday - Thursday, 9 a.m. to 7 p.m.; Friday, 9 a.m. to 5 p.m.; Sunday, 2 to 5 p.m.

### **Erindale College.**

*Jan. 31 to Feb. 18.*

Helen Lucas, paintings, flowers.

*Feb. 21 to March 11.*

Barbara Caruso, paintings, colour lock-vertical series.

*March 15 to April 8.*

Spring Forward. Annual exhibition of work by students in U of T/Sheridan co-operative program in art and art history.

Gallery hours: Monday - Friday, 10 a.m. to 9 p.m.; Saturday - Sunday, 2 to 5 p.m.

Listings were those available at press time. Readers are advised to check with the information telephone numbers given in case of changes. Letters should be addressed to the department concerned, University of Toronto, Toronto, M5S 1A1, unless otherwise indicated.



## CONCERTS

### ROYAL CONSERVATORY OF MUSIC

#### Royal Conservatory Orchestra.

*Friday, Feb. 4.*

Guest conductor Lorand Fenyves.

*Friday, Feb. 18.*

Guest conductor Uri Mayer.

*Friday, Feb. 25.*

Guest conductor Victor Feldbrill.

*Friday, March 4.*

Guest conductor Boris Brott.

*Wednesday, March 30.*

Guest conductor Iona Brown.

All concerts in Church of the Redeemer, Bloor St. W. and Avenue Road. 8 p.m.

Tickets \$7.50, \$5 and \$3.50; students and senior citizens from \$2.75.

*Tickets available from Conservatory box office, 978-3797.*

#### Adrienne Shannon and Joy Innis.

*Sunday, Feb. 13.*

Two piano recital, Alumni Association scholarship fund. Concert Hall. 3 p.m.

Tickets \$5, students and senior citizens \$3.

*Information on these and other Conservatory concerts available from publicity office, 978-3771.*

### EDWARD JOHNSON BUILDING Faculty Artists Series.

*Saturday, Feb. 5.*

Works by J.S. Bach, Schönberg, Ravel and Brahms.

*Saturday, March 26.*

Works by Prokofieff, Stravinsky and Rachmaninoff.

Walter Hall. 8 p.m.

Tickets \$7, students and senior citizens \$4.50.

#### Faculty Artists Composers' Concert.

*Saturday, Feb. 26.*

Walter Hall. 8 p.m.

Tickets free to Faculty Artists Series subscribers, regular single ticket rate to others.

#### Pierre Souvairan, Piano.

*Sunday, Feb. 27.*

Walter Hall. 3 p.m.

#### U of T Concert Choir.

*Sunday, March 6.*

Walter Hall. 3 p.m.

#### Boris Lysenko, Piano.

*Sunday, March 13.*

Walter Hall. 3 p.m.

#### University Singers.

*Wednesday, March 16.*

Walter Hall. 8 p.m.

#### Faculty of Music Jazz Ensemble.

*Saturday, March 19.*

MacMillan Theatre. 8 p.m.

Tickets \$4, students and senior citizens \$2.50.

#### U of T Wind Symphony.

*Sunday, March 20.*

MacMillan Theatre. 3 p.m.

#### U of T Concert Band.

*Sunday, March 27.*

MacMillan Theatre. 3 p.m.

*Information on these and other concerts in Edward Johnson Building available from box office, 978-3744.*

### TRINITY COLLEGE

#### Bach Festival.

*Saturday, March 12.*

Knox College Choir. Chapel. 4.30 p.m.

Chamber music with Douglas Bodle and friends. Seeley Hall. 8 p.m.

*Sunday, March 13.*

Trinity College Choir. Chapel. 4.30 p.m.

*Information: Toronto School of Theology, 978-4040; Office of Convocation, Trinity College, 978-2651.*

## PLAYS & OPERA

#### George Ignatieff Theatre.

*Feb. 7 to 12.*

"Camelot" by Lerner and Loewe, co-production of Trinity College Dramatic Society and St. Michael's College. Performances Feb. 7 to 11 at 8 p.m., Feb. 12 at 2 p.m. Tickets \$5, students \$4.

*March 2 to 6*

"An Evening with Dorothy Parker" adapted and directed by Susan Lowrie. Performances at 8 p.m. Tickets \$1.50. George Ignatieff Theatre, Trinity College, Devonshire Place.

*Information: Trinity College Dramatic Society, 978-4166.*

#### Glen Morris Studio Theatre.

*Feb. 8 to 12.*

"Back to Beulah" by W.O. Mitchell.

*March 8 to 12.*

"Measure for Measure".

*March 22 to 26.*

"Getting Out" by Marsha Norman. Graduate Centre for Study of Drama season at Studio Theatre, 8 Glen Morris St. Performances at 8 p.m. Tickets \$2. *Information, 978-8668.*

#### Hart House Theatre.

*Feb. 23 to 26 and March 2 to 5.*

"Major Barbara" by Shaw. Last of four plays, Drama Centre 1983 season. Performances at 8 p.m. Tickets \$6, students and senior citizens \$3. *Information, 978-8668.*

#### MacMillan Theatre.

*March 4, 5, 11 and 12.*

"Dido and Aeneas" by Purcell and "L'Heure Espagnole" by Ravel. Opera Division, Faculty of Music, 1983 season. Performances at 8 p.m. Tickets \$7, students and senior citizens \$4.50. *Information, 978-3744.*

## MISCELLANY

#### Film Series.

*Sundays, Jan. 16, 23, and 30, Feb. 6.*

Classic feature films, series sponsored jointly by Young Alumni and New College; screenings at New College at 7 p.m. Series membership \$3.

*Information: Department of Alumni Affairs, 978-8990; Adrian Bradford, 497-5839 evenings.*

#### Engineering Open House.

*Friday and Saturday, Feb. 11 and 12.*

Sandford Fleming and Galbraith Buildings, departmental tours and displays. Friday, 4 to 10 p.m.; Saturday, 10 a.m. to 5 p.m.

*Information: Alumni Office, Faculty of Applied Science & Engineering, 978-4941.*

#### Woodsworth College Alumni.

*Saturday, Feb. 12.*

Annual dinner; guest speaker James E. Cruise, Royal Ontario Museum. Upper Canada Room, Royal York Hotel. Reception 6.30 p.m., dinner 7.30 p.m. Tickets \$20.

*Information: Ruby Steiger, 233-4892.*

#### Men's Hockey.

*Wednesday, Feb. 16.*

Blues vs McMaster.

*Saturday, Feb. 19.*

Blues vs York.

Varsity Arena. 7.30 p.m.

Tickets \$4 and \$3, students \$2.

*Information and other intercollegiate schedules: Department of Athletics & Recreation, 978-3443 or 978-3437.*

#### Innis College Alumni Valentine's Party.

*Friday, Feb. 18.*

Innis Pub. 8 p.m. Admission \$3.

*Information: Innis College, 978-8571.*

#### Trinity College Art Sale.

*Wednesday and Thursday, March 2 and 3.*

Works by professional artists. Seeley Hall, Trinity College. Wednesday 6 to 10 p.m., admission \$5 includes refreshments and chance to win work by David Partridge; Thursday 11 a.m. to 7 p.m.

*Information: Office of Convocation, Trinity College, 978-2651.*

#### U.C. Theatre Evening.

*Thursday, March 3.*

Performance of "Major Barbara" at Hart House Theatre will be preceded by buffet supper in Croft Chapter House at 5.30 p.m. and informal discussion on Shaw and his play with three faculty members from English department. Tickets \$18 per person.

*Information: Alumni Office, University College, 978-8601 or 978-8746.*



# THE GRADUATE TEST NO. 19

THE WINNER OF THE GRADUATE TEST No. 17 in the September/October issue was Barbara Alnwick, of Dorval. A copy of *Krieghoff* by J. Russell Harper has been mailed. We received a total of 318 entries. In addition, copies of *The Fleury Play of Herod* are being mailed to five runners-up: Dominick Amato, Toronto; Jack W. Davidson, Manotick; Catharine Dixon, Elliot Lake; Margaret MacKenzie, Tiverton; and to the headquarters staff of the North Vancouver District Library.

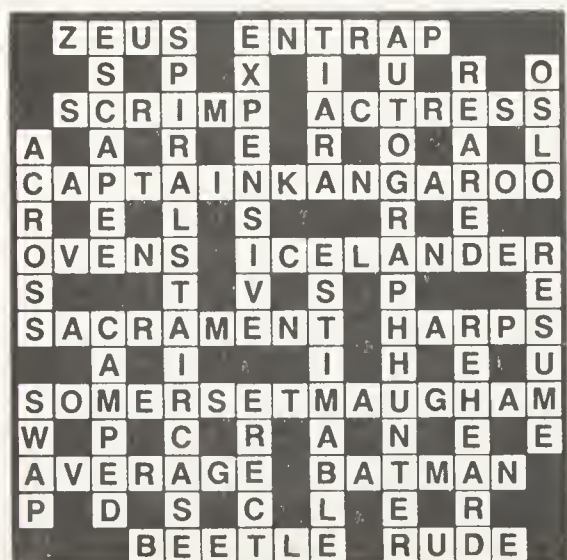
For Test No. 19 the University of Toronto Press has generously provided the *Dictionary of Newfoundland English* edited by G.M. Story, W.J. Kirwin and J.D.A. Widdowson wherein it will be discovered that to glutch is to swallow or to gulp down (with difficulty); a roaration is a deep and prolonged noise; slommocky is of a slovenly, untidy appearance; and a twack is a shopper who looks over all the commodities but buys nothing.

Entries must be postmarked on or before Feb. 28. The solution of Test No. 19 will be in the March/April issue, the winner will be announced in May/June.

Address entries to: The Graduate Test, Department of Information Services, University of Toronto, Toronto, M5S 1A1. And please don't forget to include your name and address.

P.S.: To those who noticed, we apologize: Patchwork, not pitchfork, was the correct solution to 11 across.

## Solution to The Graduate Test No. 18.

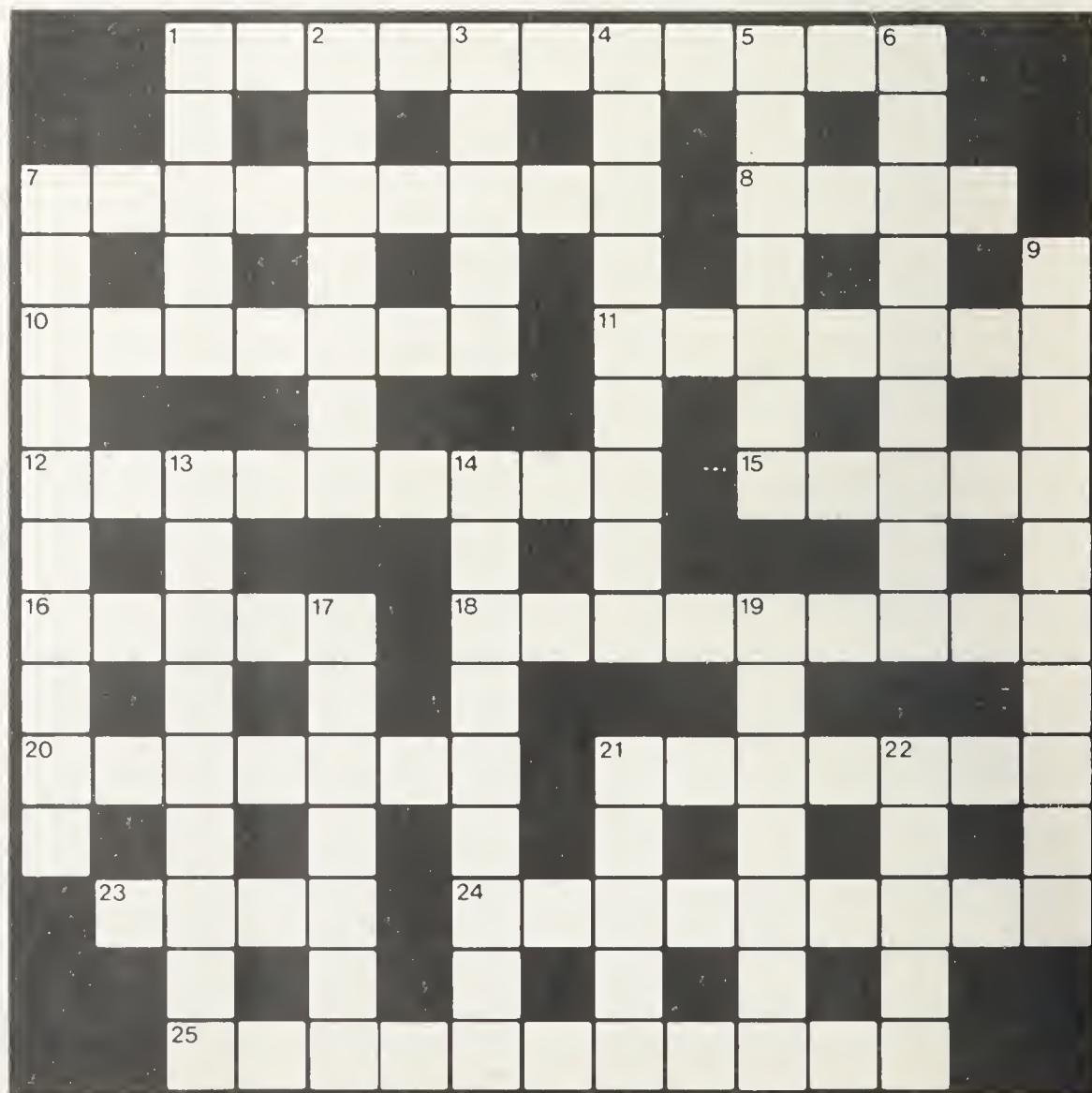


## ACROSS

1. Disloyal purpose in list (11)
7. Ruined ancestral house of Henry V (9)
8. Rush an animal back (4)
10. Lower back after title cut (7)
11. Women's amendment meets certain obliteration (7)
12. Realign sternmost scope (9)
15. Approaches a listener in Nova Scotia (5)
16. Tell country (5)
18. Digesting grits as it becomes as inflammation (9)
20. Take back the twentieth letter the cardinal returns (7)
21. Different colleagues of Cousteau have energy (7)
23. Eagerness to laze around (4)
24. He will dissect one very small particle then sit about (9)
25. Excitement: outspoken know-it-all has it twice on the way back (11)

## DOWN

1. Characteristic singer (5)
2. Captivate our hair-raising overhead (7)
3. Passively protested glossy material (5)
4. Controlled disorderly revel in monster's home (9)
6. Performer going on without misleading cue (9)
7. Final recourse at the end of a vacation? (4,6)
9. Arrangement of ten stripes constantly repeated (10)
13. Curators in fitting suite (9)
14. Drop beneath a silly thing at close of day (9)
17. Eastern apostle and French decoration (7)
19. A stringed instrument in Rhode Island — delicacy of Italian origin (7)
21. Play five hundred, strike one (5)
22. Dominance of sound of falling water (5)





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